

# Chapter 17

## Statement of Cash Flows

### STUDY OBJECTIVES

After studying this chapter, you should be able to:

- 1 Indicate the usefulness of the statement of cash flows.
- 2 Distinguish among operating, investing, and financing activities.
- 3 Prepare a statement of cash flows using the indirect method.
- 4 Analyze the statement of cash flows.



### The Navigator

Scan <b>Study Objectives</b>	■
Read <b>Feature Story</b>	■
Read <b>Preview</b>	■
Read text and answer <b>DO IT!</b> p. 736 ■ p. 743 ■ p. 746 ■ p. 749 ■	■
Work <b>Comprehensive DO IT!</b> 1 p. 750	■
Review <b>Summary of Study Objectives</b>	■
Work <b>Comprehensive DO IT!</b> 2 p. 765	■
Answer <b>Self-Study Questions</b>	■
Complete <b>Assignments</b>	■

### Feature Story

#### GOT CASH?

In today's environment, companies must be ready to respond to changes quickly in order to survive and thrive. They need to produce new products and expand into new markets continually. To do this takes cash—lots and lots of cash. Keeping lots of cash available is a real challenge for a young company. It requires careful cash management and attention to cash flow.

One company that managed cash successfully in its early years was **Microsoft** ([www.microsoft.com](http://www.microsoft.com)). During those years the company paid much of its payroll with stock options (rights to purchase company stock in the future at a given price) instead of cash. This strategy conserved cash, and turned more than a thousand of its employees into millionaires during the company's first 20 years of business.

In recent years Microsoft has had a different kind of cash problem. Now that it has reached a more "mature" stage in life, it generates so much cash—roughly \$1 billion per month—that it cannot always figure out what to do with it. By 2004 Microsoft had accumulated \$60 billion.

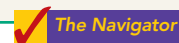


The company said it was accumulating cash to invest in new opportunities, buy other companies, and pay off pending lawsuits. But for years, the federal government has blocked attempts by Microsoft to buy anything other than small firms because it feared that purchase of a large firm would only increase Microsoft's monopolistic position. In addition, even the largest estimates of Microsoft's legal obligations related to pending lawsuits would use up only about \$6 billion in cash.

Microsoft's stockholders have complained for years that holding all this cash was putting a drag on the company's profitability. Why? Because Microsoft had the cash invested in very low-yielding government securities. Stockholders felt that the company either should find new investment projects that would bring higher returns, or return some of the cash to stockholders.

Finally, in July 2004 Microsoft announced a plan to return cash to stockholders, by paying a special one-time \$32 billion dividend in December 2004. This special dividend was so large that, according to the U.S. Commerce Department, it caused total personal income in the United States to rise by 3.7% in one month—the largest monthly increase ever recorded by the agency. (It also made the holiday season brighter, especially for retailers in the Seattle area.) Microsoft also doubled its regular annual dividend to \$3.50 per share. Further, it announced that it would spend another \$30 billion over the next four years buying treasury stock. In addition, in 2008 Microsoft offered to buy Yahoo! for \$44.6 billion. These actions will help to deplete some of its massive cash horde, but as you will see in this chapter, for a cash-generating machine like Microsoft, the company will be anything but cash-starved.

**Source:** "Business: An End to Growth? Microsoft's Cash Bonanza," *The Economist*, July 23, 2005, p. 61.



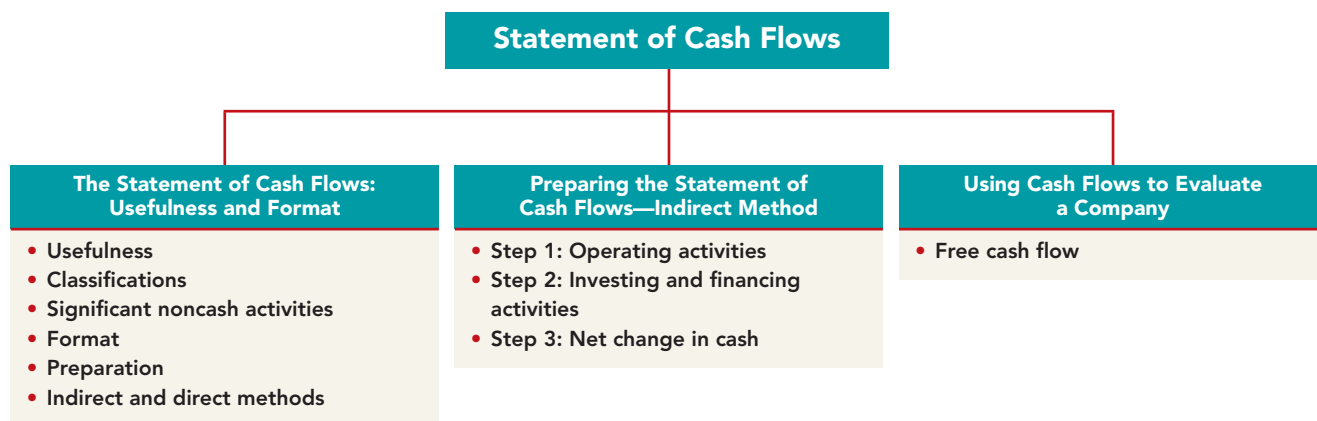
## Inside Chapter 17...

- **Net What?** (p. 735)
- **GM Must Sell More Cars** (p. 744)

## Preview of Chapter 17

The balance sheet, income statement, and retained earnings statement do not always show the whole picture of the financial condition of a company or institution. In fact, looking at the financial statements of some well-known companies, a thoughtful investor might ask questions like these: How did **Eastman Kodak** finance cash dividends of \$649 million in a year in which it earned only \$17 million? How could **United Airlines** purchase new planes that cost \$1.9 billion in a year in which it reported a net loss of over \$2 billion? How did the companies that spent a combined fantastic \$3.4 trillion on mergers and acquisitions in a recent year finance those deals? Answers to these and similar questions can be found in this chapter, which presents the statement of cash flows.

The content and organization of this chapter are as follows.



## THE STATEMENT OF CASH FLOWS: USEFULNESS AND FORMAT

The balance sheet, income statement, and retained earnings statement provide only limited information about a company's cash flows (cash receipts and cash payments). For example, comparative balance sheets show the increase in property, plant, and equipment during the year. But they do not show how the additions were financed or paid for. The income statement shows net income. But it does not indicate the amount of cash generated by operating activities. The retained earnings statement shows cash dividends declared but not the cash dividends paid during the year. None of these statements presents a detailed summary of where cash came from and how it was used.

### Usefulness of the Statement of Cash Flows

#### STUDY OBJECTIVE 1

Indicate the usefulness of the statement of cash flows.

The **statement of cash flows** reports the cash receipts, cash payments, and net change in cash resulting from operating, investing, and financing activities during a period. The information in a statement of cash flows should help investors, creditors, and others assess:

1. **The entity's ability to generate future cash flows.** By examining relationships between items in the statement of cash flows, investors can make predictions of the amounts, timing, and uncertainty of future cash flows better than they can from accrual basis data.

2. **The entity's ability to pay dividends and meet obligations.** If a company does not have adequate cash, it cannot pay employees, settle debts, or pay dividends. Employees, creditors, and stockholders should be particularly interested in this statement, because it alone shows the flows of cash in a business.
3. **The reasons for the difference between net income and net cash provided (used) by operating activities.** Net income provides information on the success or failure of a business enterprise. However, some financial statement users are critical of accrual-basis net income because it requires many estimates. As a result, users often challenge the reliability of the number. Such is not the case with cash. Many readers of the statement of cash flows want to know the reasons for the difference between net income and net cash provided by operating activities. Then they can assess for themselves the reliability of the income number.
4. **The cash investing and financing transactions during the period.** By examining a company's investing and financing transactions, a financial statement reader can better understand why assets and liabilities changed during the period.



#### ETHICS NOTE

Though we would discourage reliance on cash flows to the exclusion of accrual accounting, comparing cash from operations to net income can reveal important information about the "quality" of reported net income. Such a comparison can reveal the extent to which net income provides a good measure of actual performance.

## Classification of Cash Flows

The statement of cash flows classifies cash receipts and cash payments as operating, investing, and financing activities. Transactions and other events characteristic of each kind of activity are as follows.

1. **Operating activities** include the cash effects of transactions that create revenues and expenses. They thus enter into the determination of net income.
2. **Investing activities** include (a) acquiring and disposing of investments and property, plant, and equipment, and (b) lending money and collecting the loans.
3. **Financing activities** include (a) obtaining cash from issuing debt and repaying the amounts borrowed, and (b) obtaining cash from stockholders, repurchasing shares, and paying dividends.

The operating activities category is the most important. It shows the cash provided by company operations. This source of cash is generally considered to be the best measure of a company's ability to generate sufficient cash to continue as a going concern.

Illustration 17-1 (page 734) lists typical cash receipts and cash payments within each of the three classifications. **Study the list carefully.** It will prove very useful in solving homework exercises and problems.

Note the following general guidelines:

1. Operating activities involve income statement items.
2. Investing activities involve cash flows resulting from changes in investments and long-term asset items.
3. Financing activities involve cash flows resulting from changes in long-term liability and stockholders' equity items.

Companies classify as operating activities some cash flows related to investing or financing activities. For example, receipts of investment revenue (interest and dividends) are classified as operating activities. So are payments of interest to lenders. Why are these considered operating activities? **Because companies report these items in the income statement, where results of operations are shown.**

#### STUDY OBJECTIVE 2

Distinguish among operating, investing, and financing activities.

## 734 Chapter 17 Statement of Cash Flows

### Illustration 17-1

Typical receipt and payment classifications



### TYPES OF CASH INFLOWS AND OUTFLOWS

#### Operating activities—Income statement items

Cash inflows:

- From sale of goods or services.
- From interest received and dividends received.

Cash outflows:

- To suppliers for inventory.
- To employees for services.
- To government for taxes.
- To lenders for interest.
- To others for expenses.

#### Investing activities—Changes in investments and long-term assets

Cash inflows:

- From sale of property, plant, and equipment.
- From sale of investments in debt or equity securities of other entities.
- From collection of principal on loans to other entities.

Cash outflows:

- To purchase property, plant, and equipment.
- To purchase investments in debt or equity securities of other entities.
- To make loans to other entities.

#### Financing activities—Changes in long-term liabilities and stockholders' equity

Cash inflows:

- From sale of common stock.
- From issuance of long-term debt (bonds and notes).

Cash outflows:

- To stockholders as dividends.
- To redeem long-term debt or reacquire capital stock (treasury stock).

## Significant Noncash Activities

Not all of a company's significant activities involve cash. Examples of significant noncash activities are:

1. Direct issuance of common stock to purchase assets.
2. Conversion of bonds into common stock.
3. Direct issuance of debt to purchase assets.
4. Exchanges of plant assets.

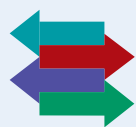
**Companies do not report in the body of the statement of cash flows significant financing and investing activities that do not affect cash.** Instead, they report these activities in either a **separate schedule** at the bottom of the statement of cash flows or in a **separate note or supplementary schedule** to the financial statements. The reporting of these noncash activities in a separate schedule satisfies the **full disclosure principle**.

*In solving homework assignments you should present significant noncash investing and financing activities in a separate schedule at the bottom of the statement of cash flows. (See the last entry in Illustration 17-2, at the bottom of page 735, for an example.)*

### HELPFUL HINT

Do not include noncash investing and financing activities in the body of the statement of cash flows. Report this information in a separate schedule.

## ACCOUNTING ACROSS THE ORGANIZATION



### Net What?

Net income is not the same as net cash provided by operating activities. Below are some results from recent annual reports (dollars in millions). Note the wide disparity among these companies, all of which engaged in retail merchandising.

Company	Net Income	Net Cash Provided by Operating Activities
Kohl's Corporation	\$ 1,083	\$ 1,234
Wal-Mart Stores, Inc.	11,284	20,164
J. C. Penney Company, Inc.	1,153	1,255
Costco Wholesale Corp.	1,082	2,076
Target Corporation	2,849	4,125



In general, why do differences exist between net income and net cash provided by operating activities?

## Format of the Statement of Cash Flows

The general format of the statement of cash flows presents the results of the three activities discussed previously—operating, investing, and financing—plus the significant noncash investing and financing activities. Illustration 17-2 shows a widely used form of the statement of cash flows.

COMPANY NAME		
Statement of Cash Flows		
Period Covered		
<b>Cash flows from operating activities</b>		
(List of individual items)	<u>XX</u>	
Net cash provided (used) by operating activities		XXX
<b>Cash flows from investing activities</b>		
(List of individual inflows and outflows)	<u>XX</u>	
Net cash provided (used) by investing activities		XXX
<b>Cash flows from financing activities</b>		
(List of individual inflows and outflows)	<u>XX</u>	
Net cash provided (used) by financing activities		<u>XXX</u>
<b>Net increase (decrease) in cash</b>		<u>XXX</u>
<b>Cash at beginning of period</b>		<u>XXX</u>
<b>Cash at end of period</b>		<u>XXX</u>
<b>Noncash investing and financing activities</b>		
(List of individual noncash transactions)		<u>XXX</u>

Illustration 17-2

Format of statement of cash flows

The cash flows from operating activities section always appears first, followed by the investing activities section and then the financing activities section.

**DO IT!****CLASSIFICATION OF CASH FLOWS****action plan**

- ✓ Identify the three types of activities used to report all cash inflows and outflows.
- ✓ Report as operating activities the cash effects of transactions that create revenues and expenses and enter into the determination of net income.
- ✓ Report as investing activities transactions that (a) acquire and dispose of investments and long-term assets and (b) lend money and collect loans.
- ✓ Report as financing activities transactions that (a) obtain cash from issuing debt and repay the amounts borrowed and (b) obtain cash from stockholders and pay them dividends.

During its first week, Duffy & Stevenson Company had these transactions.

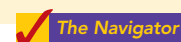
1. Issued 100,000 shares of \$5 par value common stock for \$800,000 cash.
2. Borrowed \$200,000 from Castle Bank, signing a 5-year note bearing 8% interest.
3. Purchased two semi-trailer trucks for \$170,000 cash.
4. Paid employees \$12,000 for salaries and wages.
5. Collected \$20,000 cash for services provided.

Classify each of these transactions by type of cash flow activity.

**Solution**

- |                       |                       |
|-----------------------|-----------------------|
| 1. Financing activity | 4. Operating activity |
| 2. Financing activity | 5. Operating activity |
| 3. Investing activity |                       |

Related exercise material: BE17-1, BE17-2, BE17-3, E17-1, E17-2, E17-3, and **DO IT!** 17-1.



## Preparing the Statement of Cash Flows

Companies prepare the statement of cash flows differently from the three other basic financial statements. First, it is not prepared from an adjusted trial balance. It requires detailed information concerning the changes in account balances that occurred between two points in time. An adjusted trial balance will not provide the necessary data. Second, the statement of cash flows deals with cash receipts and payments. As a result, the company **must adjust** the effects of the use of accrual accounting **to determine cash flows**.

The information to prepare this statement usually comes from three sources:

- **Comparative balance sheets.** Information in the comparative balance sheets indicates the amount of the changes in assets, liabilities, and stockholders' equities from the beginning to the end of the period.
- **Current income statement.** Information in this statement helps determine the amount of cash provided or used by operations during the period.
- **Additional information.** Such information includes transaction data that are needed to determine how cash was provided or used during the period.

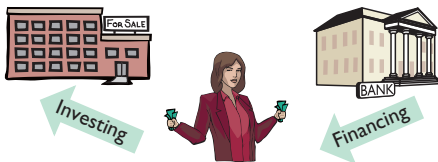
Preparing the statement of cash flows from these data sources involves three major steps, explained in Illustration 17-3 on the next page.

**Step 1: Determine net cash provided/used by operating activities by converting net income from an accrual basis to a cash basis.**



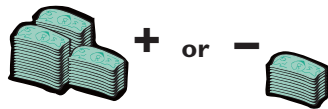
This step involves analyzing not only the current year's income statement but also comparative balance sheets and selected additional data.

**Step 2: Analyze changes in noncurrent asset and liability accounts and record as investing and financing activities, or disclose as noncash transactions.**



This step involves analyzing comparative balance sheet data and selected additional information for their effects on cash.

**Step 3: Compare the net change in cash on the statement of cash flows with the change in the cash account reported on the balance sheet to make sure the amounts agree.**



The difference between the beginning and ending cash balances can be easily computed from comparative balance sheets.

**Illustration 17-3**

Three major steps in preparing the statement of cash flows

## Indirect and Direct Methods

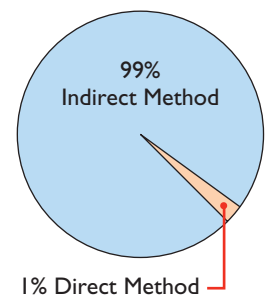
In order to perform step 1, a company **must convert net income from an accrual basis to a cash basis**. This conversion may be done by either of two methods: (1) the indirect method or (2) the direct method. **Both methods arrive at the same total amount** for “Net cash provided by operating activities.” They differ in **how** they arrive at the amount.

The **indirect method** adjusts net income for items that do not affect cash. A great majority of companies (98.8%) use this method, as shown in the nearby chart.<sup>1</sup> Companies favor the indirect method for two reasons: (1) It is easier and less costly to prepare, and (2) it focuses on the differences between net income and net cash flow from operating activities.

The **direct method** shows operating cash receipts and payments, making it more consistent with the objective of a statement of cash flows. The FASB has expressed a preference for the direct method, but allows the use of either method.

The next section illustrates the more popular indirect method. Appendix 17B illustrates the direct method.

### Usage of Methods



### ETHICS NOTE

Some managers have taken actions that artificially increase cash flow from operating activities. They do this by moving negative amounts out of the operating section and into the investing or financing section. One example is **WorldCom, Inc.**, which improperly capitalized expenses and showed them in the investing section.

<sup>1</sup> *Accounting Trends and Techniques—2007* (New York: American Institute of Certified Public Accountants, 2007).



## PREPARING THE STATEMENT OF CASH FLOWS—INDIRECT METHOD

### STUDY OBJECTIVE 3

Prepare a statement of cash flows using the indirect method.

To explain how to prepare a statement of cash flows using the indirect method, we use financial information from Computer Services Company. Illustration 17-4 presents Computer Services' current and previous-year balance sheets, its current-year income statement, and related financial information for the current year.

#### Illustration 17-4

Comparative balance sheets, income statement, and additional information for Computer Services Company

<b>COMPUTER SERVICES COMPANY</b>			
Comparative Balance Sheets December 31			
<u>Assets</u>	<u>2010</u>	<u>2009</u>	<u>Change in Account Balance Increase/Decrease</u>
<b>Current assets</b>			
Cash	\$ 55,000	\$ 33,000	\$ 22,000 Increase
Accounts receivable	20,000	30,000	10,000 Decrease
Merchandise inventory	15,000	10,000	5,000 Increase
Prepaid expenses	5,000	1,000	4,000 Increase
<b>Property, plant, and equipment</b>			
Land	130,000	20,000	110,000 Increase
Building	160,000	40,000	120,000 Increase
Accumulated depreciation—building	(11,000)	(5,000)	6,000 Increase
Equipment	27,000	10,000	17,000 Increase
Accumulated depreciation—equipment	(3,000)	(1,000)	2,000 Increase
Total assets	<u>\$398,000</u>	<u>\$138,000</u>	
<b><u>Liabilities and Stockholders' Equity</u></b>			
<b>Current liabilities</b>			
Accounts payable	\$ 28,000	\$ 12,000	\$ 16,000 Increase
Income tax payable	6,000	8,000	2,000 Decrease
<b>Long-term liabilities</b>			
Bonds payable	130,000	20,000	110,000 Increase
<b>Stockholders' equity</b>			
Common stock	70,000	50,000	20,000 Increase
Retained earnings	164,000	48,000	116,000 Increase
Total liabilities and stockholders' equity	<u>\$398,000</u>	<u>\$138,000</u>	

<b>COMPUTER SERVICES COMPANY</b>		
Income Statement For the Year Ended December 31, 2010		
Revenues		\$507,000
Cost of goods sold	\$150,000	
Operating expenses (excluding depreciation)	111,000	
Depreciation expense	9,000	
Loss on sale of equipment	3,000	
Interest expense	42,000	315,000
Income before income tax		192,000
Income tax expense		47,000
Net income		<u>\$145,000</u>

**Additional information for 2010:**

1. The company declared and paid a \$29,000 cash dividend.
2. Issued \$110,000 of long-term bonds in direct exchange for land.
3. A building costing \$120,000 was purchased for cash. Equipment costing \$25,000 was also purchased for cash.
4. The company sold equipment with a book value of \$7,000 (cost \$8,000, less accumulated depreciation \$1,000) for \$4,000 cash.
5. Issued common stock for \$20,000 cash.
6. Depreciation expense was comprised of \$6,000 for building and \$3,000 for equipment.

Illustration 17-4  
(continued)

We will now apply the three steps to the information provided for Computer Services Company.

## Step 1: Operating Activities

### DETERMINE NET CASH PROVIDED/USED BY OPERATING ACTIVITIES BY CONVERTING NET INCOME FROM AN ACCRUAL BASIS TO A CASH BASIS

To determine net cash provided by operating activities under the indirect method, companies **adjust net income in numerous ways**. A useful starting point is to understand **why** net income must be converted to net cash provided by operating activities.

Under generally accepted accounting principles, most companies use the accrual basis of accounting. This basis requires that companies record revenue when earned and record expenses when incurred. Earned revenues may include credit sales for which the company has not yet collected cash. Expenses incurred may include some items that it has not yet paid in cash. Thus, under the accrual basis, net income is not the same as net cash provided by operating activities.

Therefore, under the **indirect method**, companies must adjust net income to convert certain items to the cash basis. The indirect method (or reconciliation method) starts with net income and converts it to net cash provided by operating activities. Illustration 17-5 lists the three types of adjustments.

<b>Net Income</b>	+/-	<b>Adjustments</b>	=	<b>Net Cash Provided/ Used by Operating Activities</b>
		<ul style="list-style-type: none"> <li>• <b>Add back noncash expenses</b>, such as depreciation expense, amortization, or depletion.</li> <li>• <b>Deduct gains and add losses</b> that resulted from investing and financing activities.</li> <li>• <b>Analyze changes</b> to noncash current asset and current liability accounts.</li> </ul>		

Illustration 17-5

Three types of adjustments to convert net income to net cash provided by operating activities

#### HELPFUL HINT

Depreciation is similar to any other expense in that it reduces net income. It differs in that it does not involve a current cash outflow; that is why it must be **added back** to net income to arrive at cash provided by operating activities.

### DEPRECIATION EXPENSE

Computer Services' income statement reports depreciation expense of \$9,000. Although depreciation expense reduces net income, it does not reduce cash. In other words, depreciation expense is a noncash charge. The company must add it back to net income to arrive at net cash provided by operating activities. Computer Services reports depreciation expense in the statement of cash flows as shown on page 740.

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### Illustration 17-6

Adjustment for depreciation

Cash flows from operating activities		
Net income		\$145,000
Adjustments to reconcile net income to net cash provided by operating activities:		
<b>Depreciation expense</b>	<b>9,000</b>	
Net cash provided by operating activities		<u>\$154,000</u>

As the first adjustment to net income in the statement of cash flows, companies frequently list depreciation and similar noncash charges such as amortization of intangible assets, depletion expense, and bad debt expense.

### LOSS ON SALE OF EQUIPMENT

Illustration 17-1 states that the investing activities section should report cash received from the sale of plant assets. Because of this, **companies must eliminate from net income all gains and losses related to the disposal of plant assets, to arrive at cash provided by operating activities.**

In our example, Computer Services' income statement reports a \$3,000 loss on the sale of equipment (book value \$7,000, less \$4,000 cash received from sale of equipment). The company's loss of \$3,000 should not be included in the operating activities section of the statement of cash flows. Illustration 17-7 shows that the \$3,000 loss is eliminated by adding \$3,000 back to net income to arrive at net cash provided by operating activities.

### Illustration 17-7

Adjustment for loss on sale of equipment

Cash flows from operating activities		
Net income		\$145,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$9,000	
<b>Loss on sale of equipment</b>	<b>3,000</b>	<u>12,000</u>
Net cash provided by operating activities		\$157,000

If a gain on sale occurs, the company deducts the gain from its net income in order to determine net cash provided by operating activities. **In the case of either a gain or a loss, companies report as a source of cash in the investing activities section of the statement of cash flows the actual amount of cash received from the sale.**

### CHANGES TO NONCASH CURRENT ASSET AND CURRENT LIABILITY ACCOUNTS

A final adjustment in reconciling net income to net cash provided by operating activities involves examining all changes in current asset and current liability accounts. The accrual accounting process records revenues in the period earned and expenses in the period incurred. For example, companies use Accounts Receivable to record amounts owed to the company for sales that have been made but for which cash collections have not yet been received. They use the Prepaid Insurance account to reflect insurance that has been paid for, but which has not yet expired, and therefore has not been expensed. Similarly, the Salaries Payable account reflects salaries expense that has been incurred by the company but has not been paid.

As a result, we need to adjust net income for these accruals and prepayments to determine net cash provided by operating activities. Thus we must analyze the change in each current asset and current liability account to determine its impact on net income and cash.

**CHANGES IN NONCASH CURRENT ASSETS.** The adjustments required for changes in noncash current asset accounts are as follows: **Deduct from net income increases in current asset accounts, and add to net income decreases in current asset accounts, to arrive at net cash provided by operating activities.** We can observe these relationships by analyzing the accounts of Computer Services Company.

**Decrease in Accounts Receivable.** Computer Services Company's accounts receivable decreased by \$10,000 (from \$30,000 to \$20,000) during the period. For Computer Services this means that cash receipts were \$10,000 higher than revenues. The Accounts Receivable account in Illustration 17-8 shows that Computer Services Company had \$507,000 in revenues (as reported on the income statement), but it collected \$517,000 in cash.

		Accounts Receivable	
1/1/10	Balance	30,000	
	<b>Revenues</b>	<b>507,000</b>	<b>Receipts from customers 517,000</b>
12/31/10	Balance	20,000	

**Illustration 17-8**  
Analysis of accounts receivable

To adjust net income to net cash provided by operating activities, the company adds to net income the decrease of \$10,000 in accounts receivable (see Illustration 17-9, page 742). When the Accounts Receivable balance increases, cash receipts are lower than revenue earned under the accrual basis. Therefore, the company deducts from net income the amount of the increase in accounts receivable, to arrive at net cash provided by operating activities.

**Increase in Merchandise Inventory.** Computer Services Company's Merchandise Inventory balance increased \$5,000 (from \$10,000 to \$15,000) during the period. The change in the Merchandise Inventory account reflects the difference between the amount of inventory purchased and the amount sold. For Computer Services this means that the cost of merchandise purchased exceeded the cost of goods sold by \$5,000. As a result, cost of goods sold does not reflect \$5,000 of cash payments made for merchandise. The company deducts from net income this inventory increase of \$5,000 during the period, to arrive at net cash provided by operating activities (see Illustration 17-9, page 742). If inventory decreases, the company adds to net income the amount of the change, to arrive at net cash provided by operating activities.

**Increase in Prepaid Expenses.** Computer Services' prepaid expenses increased during the period by \$4,000. This means that cash paid for expenses is higher than expenses reported on an accrual basis. In other words, the company has made cash payments in the current period, but will not charge expenses to income until future periods (as charges to the income statement). To adjust net income to net cash provided by operating activities, the company deducts from net income the \$4,000 increase in prepaid expenses (see Illustration 17-9, page 742).

## 742 Chapter 17 Statement of Cash Flows

### Illustration 17-9

Adjustments for changes in current asset accounts

Cash flows from operating activities		
Net income		\$145,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 9,000	
Loss on sale of equipment	3,000	
<b>Decrease in accounts receivable</b>	<b>10,000</b>	
<b>Increase in merchandise inventory</b>	<b>(5,000)</b>	
<b>Increase in prepaid expenses</b>	<b>(4,000)</b>	
		<u>13,000</u>
Net cash provided by operating activities		\$158,000

If prepaid expenses decrease, reported expenses are higher than the expenses paid. Therefore, the company adds to net income the decrease in prepaid expenses, to arrive at net cash provided by operating activities.

**CHANGES IN CURRENT LIABILITIES.** The adjustments required for changes in current liability accounts are as follows: **Add to net income increases in current liability accounts, and deduct from net income decreases in current liability accounts, to arrive at net cash provided by operating activities.**

**Increase in Accounts Payable.** For Computer Services Company, Accounts Payable increased by \$16,000 (from \$12,000 to \$28,000) during the period. That means the company received \$16,000 more in goods than it actually paid for. As shown in Illustration 17-10 (below), to adjust net income to determine net cash provided by operating activities, the company adds to net income the \$16,000 increase in Accounts Payable.

**Decrease in Income Taxes Payable.** When a company incurs income tax expense but has not yet paid its taxes, it records income tax payable. A change in the Income Tax Payable account reflects the difference between income tax expense incurred and income tax actually paid. Computer Services' Income Tax Payable account decreased by \$2,000. That means the \$47,000 of income tax expense reported on the income statement was \$2,000 less than the amount of taxes paid during the period of \$49,000. As shown in Illustration 17-10, to adjust net income to a cash basis, the company must reduce net income by \$2,000.

### Illustration 17-10

Adjustments for changes in current liability accounts

Cash flows from operating activities		
Net income		\$145,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 9,000	
Loss on sale of equipment	3,000	
Decrease in accounts receivable	10,000	
Increase in merchandise inventory	(5,000)	
Increase in prepaid expenses	(4,000)	
<b>Increase in accounts payable</b>	<b>16,000</b>	
<b>Decrease in income tax payable</b>	<b>(2,000)</b>	
		<u>27,000</u>
Net cash provided by operating activities		\$172,000

Illustration 17-10 shows that, after starting with net income of \$145,000, the sum of all of the adjustments to net income was \$27,000. This resulted in net cash provided by operating activities of \$172,000.

## Summary of Conversion to Net Cash Provided by Operating Activities—Indirect Method

As shown in the previous illustrations, the statement of cash flows prepared by the indirect method starts with net income. It then adds or deducts items to arrive at net cash provided by operating activities. The required adjustments are of three types:

1. Noncash charges such as depreciation, amortization, and depletion.
2. Gains and losses on the sale of plant assets.
3. Changes in noncash current asset and current liability accounts.

Illustration 17-11 provides a summary of these changes.

	<b>Adjustment Required to Convert Net Income to Net Cash Provided by Operating Activities</b>	
<b>Noncash Charges</b>	Depreciation expense	Add
	Patent amortization expense	Add
	Depletion expense	Add
<b>Gains and Losses</b>	Loss on sale of plant asset	Add
	Gain on sale of plant asset	Deduct
<b>Changes in Current Assets and Current Liabilities</b>	Increase in current asset account	Deduct
	Decrease in current asset account	Add
	Increase in current liability account	Add
	Decrease in current liability account	Deduct

### Illustration 17-11

Adjustments required to convert net income to net cash provided by operating activities

## DO IT!

Josh's PhotoPlus reported net income of \$73,000 for 2010. Included in the income statement were depreciation expense of \$7,000 and a gain on sale of equipment of \$2,500. Josh's comparative balance sheets show the following balances.

	<u>12/31/09</u>	<u>12/31/10</u>
Accounts receivable	\$17,000	\$21,000
Accounts payable	6,000	2,200

Calculate net cash provided by operating activities for Josh's PhotoPlus.

### Solution

Cash flows from operating activities		
Net income		\$73,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$7,000	
Gain on sale of equipment	(2,500)	
Increase in accounts receivable	(4,000)	
Decrease in accounts payable	(3,800)	(3,300)
Net cash provided by operating activities		<u>\$69,700</u>

### CASH FROM OPERATING ACTIVITIES

### action plan

- ✓ Add noncash charges such as depreciation back to net income to compute net cash provided by operating activities.
- ✓ Deduct from net income gains on the sale of plant assets, or add losses back to net income, to compute net cash provided by operating activities.
- ✓ Use changes in noncash current asset and current liability accounts to compute net cash provided by operating activities.

Related exercise material: BE17-4, BE17-5, BE17-6, BE17-7, E17-4, E17-5, E17-6, E17-7, E17-8, and **DO IT!** 17-2.

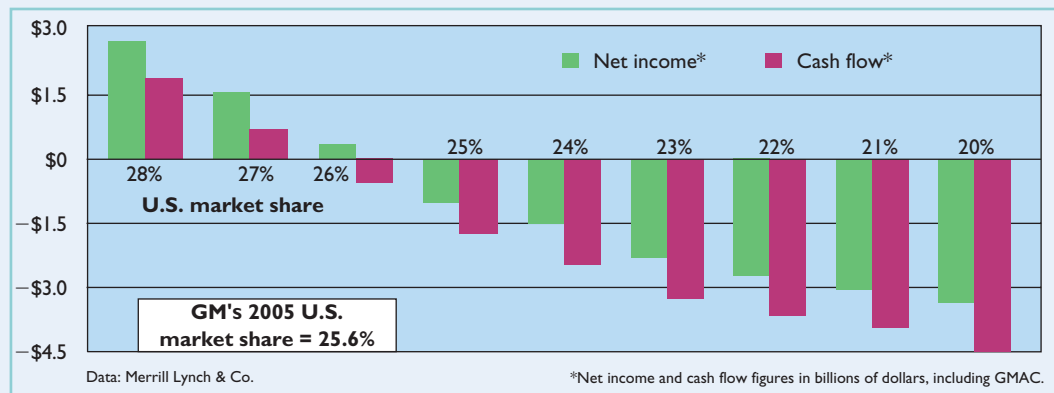
## ACCOUNTING ACROSS THE ORGANIZATION



### GM Must Sell More Cars

Market share matters—and it shows up in the accounting numbers. Just ask **General Motors**. In recent years GM has seen its market share erode until, at 25.6% of the market, the company reached the point where it actually consumed more cash than it generated. It isn't time to panic yet—GM has about \$20 billion in cash on hand—but it is time to come up with a plan.

To address immediate cash needs, GM management may have to quit paying its \$1.1 billion annual dividend, and it may have to sell off some assets and businesses. But in the long term, GM must either increase its market share, or shrink its operations to fit its sales figures. The following table shows net income and cash provided by operating activities at various market-share levels.



Source: David Welch and Dan Beucke, "Why GM's Plan Won't Work," *Business Week*, May 9, 2005, pp. 85–93.



Why does GM's cash provided by operating activities drop so precipitously when the company's sales figures decline?

## Step 2: Investing and Financing Activities

### ANALYZE CHANGES IN NONCURRENT ASSET AND LIABILITY ACCOUNTS AND RECORD AS INVESTING AND FINANCING ACTIVITIES, OR AS NONCASH INVESTING AND FINANCING ACTIVITIES

**Increase in Land.** As indicated from the change in the Land account and the additional information, the company purchased land of \$110,000 through the issuance of long-term bonds. The issuance of bonds payable for land has no effect on cash. But it is a significant noncash investing and financing activity that merits disclosure in a separate schedule. (See Illustration 17-13 on page 746.)

**Increase in Building.** As the additional data indicate, Computer Services Company acquired an office building for \$120,000 cash. This is a cash outflow reported in the investing section. (See Illustration 17-13 on page 746.)

**Increase in Equipment.** The Equipment account increased \$17,000. The additional information explains that this was a net increase that resulted from two

transactions: (1) a purchase of equipment of \$25,000, and (2) the sale for \$4,000 of equipment costing \$8,000. These transactions are investing activities. The company should report each transaction separately. Thus it reports the purchase of equipment as an outflow of cash for \$25,000. It reports the sale as an inflow of cash for \$4,000. The T account below shows the reasons for the change in this account during the year.

Equipment			
1/1/10 Balance	10,000	Cost of equipment sold	8,000
<b>Purchase of equipment</b>	<b>25,000</b>		
12/31/10 Balance	27,000		

Illustration 17-12  
Analysis of equipment

The following entry shows the details of the equipment sale transaction.

Cash	4,000		
Accumulated Depreciation	1,000		
Loss on Sale of Equipment	3,000		
Equipment		8,000	

**Increase in Bonds Payable.** The Bonds Payable account increased \$110,000. As indicated in the additional information, the company acquired land from the issuance of these bonds. It reports this noncash transaction in a separate schedule at the bottom of the statement.

**Increase in Common Stock.** The balance sheet reports an increase in Common Stock of \$20,000. The additional information section notes that this increase resulted from the issuance of new shares of stock. This is a cash inflow reported in the financing section.

**Increase in Retained Earnings.** Retained earnings increased \$116,000 during the year. This increase can be explained by two factors: (1) Net income of \$145,000 increased retained earnings. (2) Dividends of \$29,000 decreased retained earnings. The company adjusts net income to net cash provided by operating activities in the operating activities section. Payment of the dividends (not the declaration) is a **cash outflow that the company reports as a financing activity**.

### STATEMENT OF CASH FLOWS—2010


Using the previous information, we can now prepare a statement of cash flows for 2010 for Computer Services Company as shown in Illustration 17-13 (page 746).

## Step 3: Net Change in Cash

### COMPARE THE NET CHANGE IN CASH ON THE STATEMENT OF CASH FLOWS WITH THE CHANGE IN THE CASH ACCOUNT REPORTED ON THE BALANCE SHEET TO MAKE SURE THE AMOUNTS AGREE

Illustration 17-13 indicates that the net change in cash during the period was an increase of \$22,000. This agrees with the change in Cash account reported on the balance sheet in Illustration 17-4 (page 738).

<b>A</b>	=	<b>L</b>	+	<b>SE</b>
+4,000				
+1,000				
				−3,000 Exp
−8,000				
<b>Cash Flows</b>				
+4,000				



### HELPFUL HINT

When companies issue stocks or bonds for cash, the actual proceeds will appear in the statement of cash flows as a financing inflow (rather than the par value of the stocks or face value of bonds).



**746 Chapter 17 Statement of Cash Flows**

**Illustration 17-13**

Statement of cash flows,  
2010—indirect method

**HELPFUL HINT**

Note that in the investing and financing activities sections, positive numbers indicate cash inflows (receipts), and negative numbers indicate cash outflows (payments).

COMPUTER SERVICES COMPANY			
Statement of Cash Flows—Indirect Method For the Year Ended December 31, 2010			
Cash flows from operating activities			
Net income			\$145,000
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation expense	\$ 9,000		
Loss on sale of equipment	3,000		
Decrease in accounts receivable	10,000		
Increase in merchandise inventory	(5,000)		
Increase in prepaid expenses	(4,000)		
Increase in accounts payable	16,000		
Decrease in income tax payable	(2,000)		27,000
Net cash provided by operating activities			172,000
Cash flows from investing activities			
Purchase of building	(120,000)		
Purchase of equipment	(25,000)		
Sale of equipment	4,000		
Net cash used by investing activities			(141,000)
Cash flows from financing activities			
Issuance of common stock	20,000		
Payment of cash dividends	(29,000)		
Net cash used by financing activities			(9,000)
Net increase in cash			22,000
Cash at beginning of period			33,000
Cash at end of period			\$ 55,000
<b>Noncash investing and financing activities</b>			
Issuance of bonds payable to purchase land			\$110,000

**DO IT!**

**INDIRECT METHOD**

Use the information below and on page 747 to prepare a statement of cash flows using the indirect method.

**action plan**

- ✓ Determine net cash provided/used by operating activities by adjusting net income for items that did not affect cash.
- ✓ Determine net cash provided/used by investing activities and financing activities.
- ✓ Determine the net increase/decrease in cash.

REYNOLDS COMPANY			
Comparative Balance Sheets December 31			
Assets	2010	2009	Change Increase/Decrease
Cash	\$ 54,000	\$ 37,000	\$ 17,000 Increase
Accounts receivable	68,000	26,000	42,000 Increase
Inventories	54,000	—	54,000 Increase
Prepaid expenses	4,000	6,000	2,000 Decrease
Land	45,000	70,000	25,000 Decrease
Buildings	200,000	200,000	—
Accumulated depreciation—buildings	(21,000)	(11,000)	10,000 Increase
Equipment	193,000	68,000	125,000 Increase
Accumulated depreciation—equipment	(28,000)	(10,000)	18,000 Increase
Totals	\$569,000	\$386,000	

**Liabilities and Stockholders' Equity**

Accounts payable	\$ 23,000	\$ 40,000	\$ 17,000 Decrease
Accrued expenses payable	10,000	—0—	10,000 Increase
Bonds payable	110,000	150,000	40,000 Decrease
Common stock (\$1 par)	220,000	60,000	160,000 Increase
Retained earnings	206,000	136,000	70,000 Increase
Totals	<u>\$569,000</u>	<u>\$386,000</u>	

**REYNOLDS COMPANY**

Income Statement  
For the Year Ended December 31, 2010

Revenues		\$890,000
Cost of goods sold	\$465,000	
Operating expenses	221,000	
Interest expense	12,000	
Loss on sale of equipment	<u>2,000</u>	<u>700,000</u>
Income before income taxes		190,000
Income tax expense		<u>65,000</u>
Net income		<u>\$125,000</u>

**Additional information:**

- Operating expenses include depreciation expense of \$33,000 and charges from prepaid expenses of \$2,000.
- Land was sold at its book value for cash.
- Cash dividends of \$55,000 were declared and paid in 2010.
- Interest expense of \$12,000 was paid in cash.
- Equipment with a cost of \$166,000 was purchased for cash. Equipment with a cost of \$41,000 and a book value of \$36,000 was sold for \$34,000 cash.
- Bonds of \$10,000 were redeemed at their face value for cash. Bonds of \$30,000 were converted into common stock.
- Common stock (\$1 par) of \$130,000 was issued for cash.
- Accounts payable pertain to merchandise suppliers.

**HELPFUL HINT**

- Determine net cash provided/used by operating activities, recognizing that operating activities generally relate to changes in current assets and current liabilities.
- Determine net cash provided/used by investing activities, recognizing that investing activities generally relate to changes in noncurrent assets.
- Determine net cash provided/used by financing activities, recognizing that financing activities generally relate to changes in long-term liabilities and stockholders' equity accounts.

**Solution**

**REYNOLDS COMPANY**

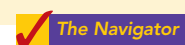
Statement of Cash Flows—Indirect Method  
For the Year Ended December 31, 2010

Cash flows from operating activities		
Net income		\$125,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 33,000	
Loss on sale of equipment	2,000	
Increase in accounts receivable	(42,000)	
Increase in inventories	(54,000)	
Decrease in prepaid expenses	2,000	
Decrease in accounts payable	(17,000)	
Increase in accrued expenses payable	<u>10,000</u>	<u>(66,000)</u>
Net cash provided by operating activities		<u>59,000</u>

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Cash flows from investing activities		
Sale of land	25,000	
Sale of equipment	34,000	
Purchase of equipment	(166,000)	
Net cash used by investing activities		(107,000)
Cash flows from financing activities		
Redemption of bonds	(10,000)	
Sale of common stock	130,000	
Payment of dividends	(55,000)	
Net cash provided by financing activities		65,000
Net increase in cash		17,000
Cash at beginning of period		37,000
Cash at end of period		<u>\$ 54,000</u>
<b>Noncash investing and financing activities</b>		
Conversion of bonds into common stock		<u>\$ 30,000</u>

Related exercise material: BE17-4, BE17-5, BE17-6, BE17-7, E17-4, E17-5, E17-6, E17-7, E17-8, and E17-9.



## USING CASH FLOWS TO EVALUATE A COMPANY

### STUDY OBJECTIVE 4

Analyze the statement of cash flows.

Traditionally, investors and creditors have most commonly used ratios based on accrual accounting. These days, cash-based ratios are gaining increased acceptance among analysts.

### Free Cash Flow

In the statement of cash flows, cash provided by operating activities is intended to indicate the cash-generating capability of the company. Analysts have noted, however, that **cash provided by operating activities fails to take into account that a company must invest in new fixed assets** just to maintain its current level of operations. Companies also must at least **maintain dividends at current levels** to satisfy investors. The measurement of free cash flow provides additional insight regarding a company's cash-generating ability. **Free cash flow** describes the cash remaining from operations after adjustment for capital expenditures and dividends.

Consider the following example: Suppose that MPC produced and sold 10,000 personal computers this year. It reported \$100,000 cash provided by operating activities. In order to maintain production at 10,000 computers, MPC invested \$15,000 in equipment. It chose to pay \$5,000 in dividends. Its free cash flow was \$80,000 (\$100,000 - \$15,000 - \$5,000). The company could use this \$80,000 either to purchase new assets to expand the business or to pay an \$80,000 dividend and continue to produce 10,000 computers. In practice, free cash flow is often calculated with the formula in Illustration 17-14. (Alternative definitions also exist.)

Illustration 17-14  
Free cash flow

$$\text{Free Cash Flow} = \text{Cash Provided by Operating Activities} - \text{Capital Expenditures} - \text{Cash Dividends}$$

Illustration 17-15 provides basic information (in billions) excerpted from the 2007 statement of cash flows of **Microsoft Corporation**.



### MICROSOFT CORPORATION

Statement of Cash Flows (partial)  
2007

Cash provided by operating activities		\$17,796
Cash flows from investing activities		
Additions to property and equipment	\$ (2,264)	
Purchases of investments	(36,308)	
Sales of investments	41,451	
Acquisitions of companies	(1,150)	
Maturities of investments	4,736	
Other	<u>(376)</u>	
Cash provided by investing activities		6,089
Cash paid for dividends		<u>(3,805)</u>

#### Illustration 17-15

Microsoft cash flow information (\$ in millions)

Microsoft's free cash flow is calculated as shown in Illustration 17-16.

Cash provided by operating activities	\$17,796
Less: Expenditures on property, plant, and equipment	2,264
Dividends paid	<u>3,805</u>
Free cash flow	<u>\$11,727</u>

#### Illustration 17-16

Calculation of Microsoft's free cash flow (\$ in millions)

This is a tremendous amount of cash generated in a single year. It is available for the acquisition of new assets, the retirement of stock or debt, or the payment of dividends. As indicated in the Feature Story, for example, Microsoft is attempting to buy **Yahoo!** for over \$44 billion as part of its acquisition strategy.

**Oracle Corporation** is one of the world's largest sellers of database software and information management services. Like Microsoft, its success depends on continuing to improve its existing products while developing new products to keep pace with rapid changes in technology. Oracle's free cash flow for 2007 was \$3,955 million. This is impressive, but significantly less than Microsoft's amazing ability to generate cash.

## DO IT!

Chicago Corporation issued the following statement of cash flows for 2010.

#### FREE CASH FLOW

### CHICAGO CORPORATION

Statement of Cash Flows—Indirect Method  
For the Year Ended December 31, 2010

Cash flows from operating activities		
Net income		\$19,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 8,100	
Loss on sale of equipment	1,300	
Decrease in accounts receivable	6,900	
Increase in inventory	<u>(4,000)</u>	

**750 Chapter 17 Statement of Cash Flows**

Decrease in accounts payable	(2,000)	10,300
Net cash provided by operating activities		29,300
Cash flows from investing activities		
Sale of investments	1,100	
Purchase of equipment	(19,000)	
Net cash used by investing activities		(17,900)
Cash flows from financing activities		
Issuance of stock	10,000	
Payment on long-term note payable	(5,000)	
Payment for dividends	(9,000)	
Net cash used by financing activities		(4,000)
Net increase in cash		7,400
Cash at beginning of year		10,000
Cash at end of year		<u>\$17,400</u>

(a) Compute free cash flow for Chicago Corporation. (b) Explain why free cash flow often provides better information than “Net cash provided by operating activities.”

**action plan**

- ✓ Compute free cash flow as:  
Cash provided by operating activities – Capital expenditures – Cash dividends.

**Solution**

(a) Free cash flow = \$29,300 – \$19,000 – \$9,000 = \$1,300

(b) Cash provided by operating activities fails to take into account that a company must invest in new plant assets just to maintain the current level of operations. Companies must also maintain dividends at current levels to satisfy investors. The measurement of free cash flow provides additional insight regarding a company’s cash-generating ability.

Related exercise material: BE17-8, BE17-9, BE17-10, BE17-11, E17-7, E17-9, and **DO IT!** 17-3.



**Comprehensive DO IT! 1**



The income statement for the year ended December 31, 2010, for Kosinski Manufacturing Company contains the following condensed information.

**KOSINSKI MANUFACTURING COMPANY**

**Income Statement**

**For the Year Ended December 31, 2010**

Revenues		\$6,583,000
Operating expenses (excluding depreciation)	\$4,920,000	
Depreciation expense	880,000	5,800,000
Income before income taxes		783,000
Income tax expense		353,000
Net income		<u>\$ 430,000</u>

Included in operating expenses is a \$24,000 loss resulting from the sale of machinery for \$270,000 cash. Machinery was purchased at a cost of \$750,000.

The following balances are reported on Kosinski's comparative balance sheets at December 31.

### KOSINSKI MANUFACTURING COMPANY

#### Comparative Balance Sheets (partial)

	2010	2009
Cash	\$672,000	\$130,000
Accounts receivable	775,000	610,000
Inventories	834,000	867,000
Accounts payable	521,000	501,000

Income tax expense of \$353,000 represents the amount paid in 2010. Dividends declared and paid in 2010 totaled \$200,000.

### Instructions

Prepare the statement of cash flows using the indirect method.

### action plan

- ✓ Determine net cash from operating activities. Operating activities generally relate to changes in current assets and current liabilities.
- ✓ Determine net cash from investing activities. Investing activities generally relate to changes in noncurrent assets.
- ✓ Determine net cash from financing activities. Financing activities generally relate to changes in long-term liabilities and stockholders' equity accounts.

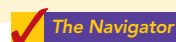
### Solution to Comprehensive **DO IT!** 1

### KOSINSKI MANUFACTURING COMPANY

#### Statement of Cash Flows—Indirect Method

For the Year Ended December 31, 2010

Cash flows from operating activities		
Net income		\$ 430,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 880,000	
Loss on sale of machinery	24,000	
Increase in accounts receivable	(165,000)	
Decrease in inventories	33,000	
Increase in accounts payable	20,000	792,000
Net cash provided by operating activities		1,222,000
Cash flows from investing activities		
Sale of machinery	270,000	
Purchase of machinery	(750,000)	
Net cash used by investing activities		(480,000)
Cash flows from financing activities		
Payment of cash dividends		(200,000)
Net increase in cash		542,000
Cash at beginning of period		130,000
Cash at end of period		\$ 672,000



## SUMMARY OF STUDY OBJECTIVES



### 1 Indicate the usefulness of the statement of cash flows.

The statement of cash flows provides information about the cash receipts, cash payments, and net change in cash resulting from the operating, investing, and financing activities of a company during the period.

### 2 Distinguish among operating, investing, and financing activities.

Operating activities include the cash effects of

transactions that enter into the determination of net income. Investing activities involve cash flows resulting from changes in investments and long-term asset items. Financing activities involve cash flows resulting from changes in long-term liability and stockholders' equity items.

### 3 Prepare a statement of cash flows using the indirect method.

The preparation of a statement of cash flows

## 752 Chapter 17 Statement of Cash Flows

involves three major steps: (1) Determine net cash provided/used by operating activities by converting net income from an accrual basis to a cash basis. (2) Analyze changes in noncurrent asset and liability accounts and record as investing and financing activities, or disclose as noncash transactions. (3) Compare the net change in cash on the statement of cash flows with the change in the cash

account reported on the balance sheet to make sure the amounts agree.

- 4 **Analyze the statement of cash flows.** Free cash flow indicates the amount of cash a company generated during the current year that is available for the payment of additional dividends or for expansion.



## GLOSSARY



**Direct method** A method of determining net cash provided by operating activities by adjusting each item in the income statement from the accrual basis to the cash basis and which shows operating cash receipts and payments. (p. 737)

**Financing activities** Cash flow activities that include (a) obtaining cash from issuing debt and repaying the amounts borrowed and (b) obtaining cash from stockholders, repurchasing shares, and paying dividends. (p. 733).

**Free cash flow** Cash provided by operating activities adjusted for capital expenditures and dividends paid. (p. 748).

**Indirect method** A method of preparing a statement of cash flows in which net income is adjusted for items that do not affect cash, to determine net cash provided by operating activities. (pp. 737, 739).

**Investing activities** Cash flow activities that include (a) purchasing and disposing of investments and property, plant, and equipment using cash and (b) lending money and collecting the loans. (p. 733).

**Operating activities** Cash flow activities that include the cash effects of transactions that create revenues and expenses and thus enter into the determination of net income. (p. 733).

**Statement of cash flows** A basic financial statement that provides information about the cash receipts, cash payments, and net change in cash during a period, resulting from operating, investing, and financing activities. (p. 732).

## APPENDIX 17A Using a Worksheet to Prepare the Statement of Cash Flows—Indirect Method

### STUDY OBJECTIVE 5

Explain how to use a worksheet to prepare the statement of cash flows using the indirect method.

When preparing a statement of cash flows, companies may need to make numerous adjustments of net income. In such cases, they often use **a worksheet to assemble and classify the data that will appear on the statement.** The worksheet is merely an aid in preparing the statement. Its use is optional. Illustration 17A-1 (page 753) shows the skeleton format of the worksheet for preparation of the statement of cash flows.

The following guidelines are important in preparing a worksheet.

1. In the balance sheet accounts section, **list accounts with debit balances separately from those with credit balances.** This means, for example, that Accumulated Depreciation appears under credit balances and not as a contra account under debit balances. Enter the beginning and ending balances of each account in the appropriate columns. Enter as reconciling items in the two middle columns the transactions that caused the change in the account balance during the year.

After all reconciling items have been entered, each line pertaining to a balance sheet account should “foot across.” That is, the beginning balance plus or minus the reconciling item(s) must equal the ending balance. When this agreement exists for all balance sheet accounts, all changes in account balances have been reconciled.

2. The bottom portion of the worksheet consists of the operating, investing, and financing activities sections. It provides the information necessary to prepare the formal statement of cash flows. **Enter inflows of cash as debits in the**

	A	B	C	D	E
1	<b>XYZ COMPANY</b>				
2	<b>Worksheet</b>				
3	<b>Statement of Cash Flows For the Year Ended . . .</b>				
4					
5		<b>End of</b>	<b>Reconciling Items</b>		<b>End of</b>
6		<b>Last Year</b>			<b>Current Year</b>
7		<b>Balances</b>	<b>Debit</b>	<b>Credit</b>	<b>Balances</b>
8	<b>Balance Sheet Accounts</b>				
9	Debit balance accounts	XX	XX	XX	XX
10		XX	XX	XX	XX
11	Totals	XXX			XXX
12	Credit balance accounts	XX	XX	XX	XX
13		XX	XX	XX	XX
14	Totals	XXX			XXX
15	<b>Statement of Cash</b>				
16	<b>Flows Effects</b>				
17	Operating activities				
18	Net income		XX		
19	Adjustments to net income		XX	XX	
20	Investing activities				
21	Receipts and payments		XX	XX	
22	Financing activities				
23	Receipts and payments		XX	XX	
24	Totals		XXX	XXX	
25	Increase (decrease) in cash		(XX)	XX	
26	Totals		XXX	XXX	
27					

Illustration 17A-1  
Format of worksheet

**reconciling columns. Enter outflows of cash as credits in the reconciling columns.** Thus, in this section, the sale of equipment for cash at book value appears as a debit under investing activities. Similarly, the purchase of land for cash appears as a credit under investing activities.

3. **The reconciling items shown in the worksheet are not entered in any journal or posted to any account.** They do not represent either adjustments or corrections of the balance sheet accounts. They are used only to facilitate the preparation of the statement of cash flows.

## Preparing the Worksheet

As in the case of worksheets illustrated in earlier chapters, preparing a worksheet involves a series of prescribed steps. The steps in this case are:

1. Enter in the balance sheet accounts section the balance sheet accounts and their beginning and ending balances.
2. Enter in the reconciling columns of the worksheet the data that explain the changes in the balance sheet accounts other than cash and their effects on the statement of cash flows.
3. Enter on the cash line and at the bottom of the worksheet the increase or decrease in cash. This entry should enable the totals of the reconciling columns to be in agreement.

To illustrate the preparation of a worksheet, we will use the 2010 data for Computer Services Company. Your familiarity with these data (from the chapter) should help you understand the use of a worksheet. For ease of reference, the comparative balance sheets, income statement, and selected data for 2010 are presented in Illustration 17A-2 (on page 754).



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**Illustration 17A-2**

Comparative balance sheets, income statement, and additional information for Computer Services Company

COMPUTER SERVICES COMPANY			
Comparative Balance Sheets			
December 31			
	2010	2009	Change in Account Balance Increase/Decrease
<b>Assets</b>			
Current assets			
Cash	\$ 55,000	\$ 33,000	\$ 22,000 Increase
Accounts receivable	20,000	30,000	10,000 Decrease
Merchandise inventory	15,000	10,000	5,000 Increase
Prepaid expenses	5,000	1,000	4,000 Increase
Property, plant, and equipment			
Land	130,000	20,000	110,000 Increase
Building	160,000	40,000	120,000 Increase
Accumulated depreciation—building	(11,000)	(5,000)	6,000 Increase
Equipment	27,000	10,000	17,000 Increase
Accumulated depreciation—equipment	(3,000)	(1,000)	2,000 Increase
<b>Total</b>	<b>\$398,000</b>	<b>\$138,000</b>	
<b>Liabilities and Stockholders' Equity</b>			
Current liabilities			
Accounts payable	\$ 28,000	\$ 12,000	\$ 16,000 Increase
Income tax payable	6,000	8,000	2,000 Decrease
Long-term liabilities			
Bonds payable	130,000	20,000	110,000 Increase
Stockholders' equity			
Common stock	70,000	50,000	20,000 Increase
Retained earnings	164,000	48,000	116,000 Increase
<b>Total liabilities and stockholders' equity</b>	<b>\$398,000</b>	<b>\$138,000</b>	

COMPUTER SERVICES COMPANY			
Income Statement			
For the Year Ended December 31, 2010			
Revenues			\$507,000
Cost of goods sold		\$150,000	
Operating expenses (excluding depreciation)		111,000	
Depreciation expense		9,000	
Loss on sale of equipment		3,000	
Interest expense		42,000	315,000
Income before income tax			192,000
Income tax expense			47,000
Net income			\$145,000

**Additional information for 2010:**

1. The company declared and paid a \$29,000 cash dividend.
2. Issued \$110,000 of long-term bonds in direct exchange for land.
3. A building costing \$120,000 was purchased for cash. Equipment costing \$25,000 was also purchased for cash.
4. The company sold equipment with a book value of \$7,000 (cost \$8,000, less accumulated depreciation \$1,000) for \$4,000 cash.
5. Issued common stock for \$20,000 cash.
6. Depreciation expense was comprised of \$6,000 for building and \$3,000 for equipment.

**DETERMINING THE RECONCILING ITEMS**

Companies can use one of several approaches to determine the reconciling items. For example, they can first complete the changes affecting net cash provided by operating activities, and then can determine the effects of financing and investing transactions. Or, they can analyze the balance sheet accounts in the order in which they are listed on the worksheet. We will follow this latter approach for Computer Services, except for cash. As indicated in step 3, **cash is handled last**.

**Accounts Receivable.** The decrease of \$10,000 in accounts receivable means that cash collections from revenues are higher than the revenues reported in the income statement. To convert net income to net cash provided by operating activities, we add the decrease of \$10,000 to net income. The entry in the reconciling columns of the worksheet is:

(a)	Operating—Decrease in Accounts Receivable	10,000	10,000
	Accounts Receivable		

**Merchandise Inventory.** Computer Services Company's Merchandise Inventory balance increases \$5,000 during the period. The Merchandise Inventory account reflects the difference between the amount of inventory that the company purchased and the amount that it sold. For Computer Services this means that the cost of merchandise purchased exceeds the cost of goods sold by \$5,000. As a result, cost of goods sold does not reflect \$5,000 of cash payments made for merchandise. We deduct this inventory increase of \$5,000 during the period from net income to arrive at net cash provided by operating activities. The worksheet entry is:

(b)	Merchandise Inventory	5,000	
	Operating—Increase in Merchandise Inventory		5,000

**Prepaid Expenses.** An increase of \$4,000 in prepaid expenses means that expenses deducted in determining net income are less than expenses that were paid in cash. We deduct the increase of \$4,000 from net income in determining net cash provided by operating activities. The worksheet entry is:

(c)	Prepaid Expenses	4,000	
	Operating—Increase in Prepaid Expenses		4,000

**Land.** The increase in land of \$110,000 resulted from a purchase through the issuance of long-term bonds. The company should report this transaction as a significant noncash investing and financing activity. The worksheet entry is:

(d)	Land	110,000	
	Bonds Payable		110,000

**Building.** The cash purchase of a building for \$120,000 is an investing activity cash outflow. The entry in the reconciling columns of the worksheet is:

(e)	Building	120,000	
	Investing—Purchase of Building		120,000

**Equipment.** The increase in equipment of \$17,000 resulted from a cash purchase of \$25,000 and the sale of equipment costing \$8,000. The book value of the equipment was \$7,000, the cash proceeds were \$4,000, and a loss of \$3,000 was recorded. The worksheet entries are:

(f)	Equipment	25,000	
	Investing—Purchase of Equipment		25,000

**HELPFUL HINT**

These amounts are asterisked in the worksheet to indicate that they result from a significant noncash transaction.

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(g)	Investing—Sale of Equipment Operating—Loss on Sale of Equipment Accumulated Depreciation—Equipment Equipment	4,000 3,000 1,000	8,000
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**Accounts Payable.** We must add the increase of \$16,000 in accounts payable to net income to determine net cash provided by operating activities. The worksheet entry is:

(h)	Operating—Increase in Accounts Payable Accounts Payable	16,000	16,000
-----	--	--------	--------

**Income Taxes Payable.** When a company incurs income tax expense but has not yet paid its taxes, it records income tax payable. A change in the Income Tax Payable account reflects the difference between income tax expense incurred and income tax actually paid. Computer Services' Income Tax Payable account decreases by \$2,000. That means the \$47,000 of income tax expense reported on the income statement was \$2,000 less than the amount of taxes paid during the period of \$49,000. To adjust net income to a cash basis, we must reduce net income by \$2,000. The worksheet entry is:

(i)	Income Taxes Payable Operating—Decrease in Income Taxes Payable	2,000	2,000
-----	---	-------	-------

**Bonds Payable.** The increase of \$110,000 in this account resulted from the issuance of bonds for land. This is a significant noncash investing and financing activity. Worksheet entry (d) above is the only entry necessary.

**Common Stock.** The balance sheet reports an increase in Common Stock of \$20,000. The additional information section notes that this increase resulted from the issuance of new shares of stock. This is a cash inflow reported in the financing section. The worksheet entry is:

(j)	Financing—Issuance of Common Stock Common Stock	20,000	20,000
-----	--	--------	--------

**Accumulated Depreciation—Building, and Accumulated Depreciation—Equipment.** Increases in these accounts of \$6,000 and \$3,000, respectively, resulted from depreciation expense. Depreciation expense is a **noncash charge that we must add to net income** to determine net cash provided by operating activities. The worksheet entries are:

(k)	Operating—Depreciation Expense—Building Accumulated Depreciation—Building	6,000	6,000
-----	--	-------	-------

(l)	Operating—Depreciation Expense—Equipment Accumulated Depreciation—Equipment	3,000	3,000
-----	--	-------	-------

**Retained Earnings.** The \$116,000 increase in retained earnings resulted from net income of \$145,000 and the declaration and payment of a \$29,000 cash dividend. Net income is included in net cash provided by operating activities, and the dividends are a financing activity cash outflow. The entries in the reconciling columns of the worksheet are:

(m)	Operating—Net Income Retained Earnings	145,000	145,000
-----	---	---------	---------

(n)	Retained Earnings Financing—Payment of Dividends	29,000	29,000
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**Disposition of Change in Cash.** The firm’s cash increased \$22,000 in 2010. The final entry on the worksheet, therefore, is:

(o)	Cash	22,000	
	Increase in Cash		22,000

As shown in the worksheet, we enter the increase in cash in the reconciling credit column as a **balancing** amount. This entry should complete the reconciliation of the changes in the balance sheet accounts. Also, it should permit the totals of the reconciling columns to be in agreement. When all changes have been explained and the reconciling columns are in agreement, the reconciling columns are ruled to complete the worksheet. The completed worksheet for Computer Services Company is shown in Illustration 17A-3.

COMPUTER SERVICES COMPANY				
Worksheet				
Statement of Cash Flows For the Year Ended December 31, 2010				
	Balance	Reconciling Items		Balance
Balance Sheet Accounts	12/31/09	Debit	Credit	12/31/10
<b>Debits</b>				
Cash	33,000	(o) 22,000		55,000
Accounts Receivable	30,000		(a) 10,000	20,000
Merchandise Inventory	10,000	(b) 5,000		15,000
Prepaid Expenses	1,000	(c) 4,000		5,000
Land	20,000	(d) 110,000*		130,000
Building	40,000	(e) 120,000		160,000
Equipment	10,000	(f) 25,000	(g) 8,000	27,000
Total	144,000			412,000
<b>Credits</b>				
Accounts Payable	12,000		(h) 16,000	28,000
Income Taxes Payable	8,000	(i) 2,000		6,000
Bonds Payable	20,000		(d) 110,000*	130,000
Accumulated Depreciation—Building	5,000		(k) 6,000	11,000
Accumulated Depreciation—Equipment	1,000	(g) 1,000	(l) 3,000	3,000
Common Stock	50,000		(j) 20,000	70,000
Retained Earnings	48,000	(n) 29,000	(m) 145,000	164,000
Total	144,000			412,000
<b>Statement of Cash Flows Effects</b>				
Operating activities				
Net income		(m) 145,000		
Decrease in accounts receivable		(a) 10,000		
Increase in merchandise inventory			(b) 5,000	
Increase in prepaid expenses			(c) 4,000	
Increase in accounts payable		(h) 16,000		
Decrease in income taxes payable			(i) 2,000	
Depreciation expense—building		(k) 6,000		
Depreciation expense—equipment		(l) 3,000		
Loss on sale of equipment		(g) 3,000		
Investing activities				
Purchase of building			(e) 120,000	
Purchase of equipment			(f) 25,000	
Sale of equipment		(g) 4,000		
Financing activities				
Issuance of common stock		(j) 20,000		
Payment of dividends			(n) 29,000	
Totals		525,000	503,000	
Increase in cash			(o) 22,000	
Totals		525,000	525,000	

\* Significant noncash investing and financing activity.

Illustration 17A-3  
Completed worksheet—  
indirect method

## SUMMARY OF STUDY OBJECTIVE FOR APPENDIX 17A



**5 Explain how to use a worksheet to prepare the statement of cash flows using the indirect method.** When there are numerous adjustments, a worksheet can be a helpful tool in preparing the statement of cash flows. Key guidelines for using a worksheet are: (1) List accounts with debit balances separately from those with credit balances. (2) In the reconciling columns in the bottom portion of the worksheet, show cash inflows as debits and cash outflows as

credits. (3) Do not enter reconciling items in any journal or account, but use them only to help prepare the statement of cash flows.

The steps in preparing the worksheet are: (1) Enter beginning and ending balances of balance sheet accounts. (2) Enter debits and credits in reconciling columns. (3) Enter the increase or decrease in cash in two places as a balancing amount.

## APPENDIX 17B Statement of Cash Flows—Direct Method

## STUDY OBJECTIVE 6

Prepare a statement of cash flows using the direct method.

To explain and illustrate the direct method, we will use the transactions of Juarez Company for 2010, to prepare a statement of cash flows. Illustration 17B-1 presents information related to 2010 for Juarez Company.

## Illustration 17B-1

Comparative balance sheets, income statement, and additional information for Juarez Company

<b>JUAREZ COMPANY</b>			
Comparative Balance Sheets December 31			
<u>Assets</u>	<u>2010</u>	<u>2009</u>	<u>Change Increase/Decrease</u>
Cash	\$191,000	\$159,000	\$ 32,000 Increase
Accounts receivable	12,000	15,000	3,000 Decrease
Inventory	170,000	160,000	10,000 Increase
Prepaid expenses	6,000	8,000	2,000 Decrease
Land	140,000	80,000	60,000 Increase
Equipment	160,000	—	160,000 Increase
Accumulated depreciation—equipment	(16,000)	—	16,000 Increase
Total	<u>\$663,000</u>	<u>\$422,000</u>	
<b><u>Liabilities and Stockholders' Equity</u></b>			
Accounts payable	\$ 52,000	\$ 60,000	\$ 8,000 Decrease
Accrued expenses payable	15,000	20,000	5,000 Decrease
Income taxes payable	12,000	—	12,000 Increase
Bonds payable	130,000	—	130,000 Increase
Common stock	360,000	300,000	60,000 Increase
Retained earnings	94,000	42,000	52,000 Increase
Total	<u>\$663,000</u>	<u>\$422,000</u>	

<b>JUAREZ COMPANY</b>		
Income Statement For the Year Ended December 31, 2010		
Revenues		\$975,000
Cost of goods sold	\$660,000	
Operating expenses (excluding depreciation)	176,000	
Depreciation expense	18,000	
Loss on sale of store equipment	1,000	
	<u>855,000</u>	
Income before income taxes		120,000
Income tax expense		36,000
Net income		<u>\$ 84,000</u>

**Additional information:**

1. In 2010, the company declared and paid a \$32,000 cash dividend.
2. Bonds were issued at face value for \$130,000 in cash.
3. Equipment costing \$180,000 was purchased for cash.
4. Equipment costing \$20,000 was sold for \$17,000 cash when the book value of the equipment was \$18,000.
5. Common stock of \$60,000 was issued to acquire land.

Illustration 17B-1  
(continued)

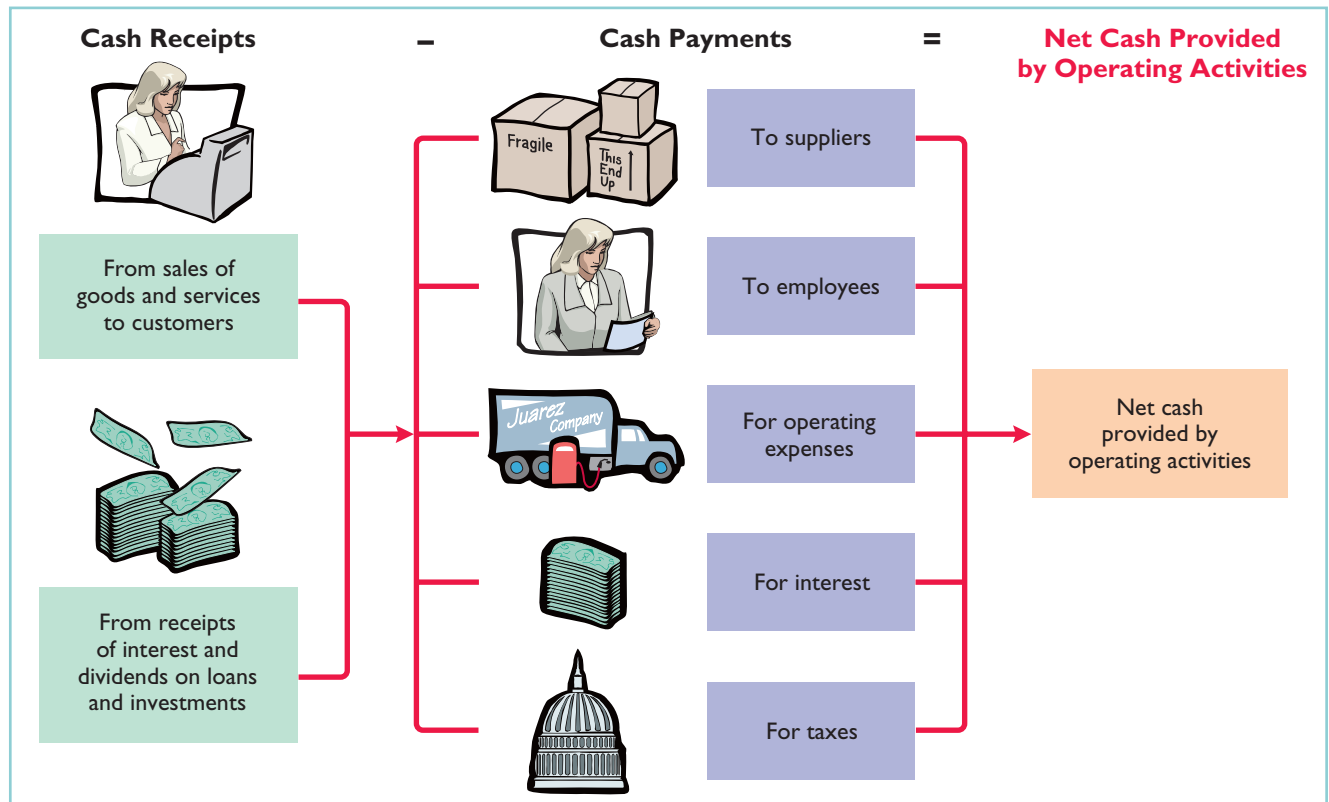
To prepare a statement of cash flows under the direct approach, we will apply the three steps outlined in Illustration 17-3 (page 737).

## Step 1: Operating Activities

### DETERMINE NET CASH PROVIDED/USED BY OPERATING ACTIVITIES BY CONVERTING NET INCOME FROM AN ACCRUAL BASIS TO A CASH BASIS

Under the **direct method**, companies compute net cash provided by operating activities by **adjusting each item in the income statement** from the accrual basis to the cash basis. To simplify and condense the operating activities section, companies **report only major classes of operating cash receipts and cash payments**. For these major classes, the difference between cash receipts and cash payments is the net cash provided by operating activities. These relationships are as shown in Illustration 17B-2.

Illustration 17B-2  
Major classes of cash receipts and payments



**An efficient way to apply the direct method is to analyze the items reported in the income statement in the order in which they are listed.** We then determine cash receipts and cash payments related to these revenues and expenses. The following pages present the adjustments required to prepare a statement of cash flows for Juarez Company using the direct approach.

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**Cash Receipts from Customers.** The income statement for Juarez Company reported revenues from customers of \$975,000. How much of that was cash receipts? To answer that, companies need to consider the change in accounts receivable during the year. When accounts receivable increase during the year, revenues on an accrual basis are higher than cash receipts from customers. Operations led to revenues, but not all of these revenues resulted in cash receipts.

To determine the amount of cash receipts, the company deducts from sales revenues the increase in accounts receivable. On the other hand, there may be a decrease in accounts receivable. That would occur if cash receipts from customers exceeded sales revenues. In that case, the company adds to sales revenues the decrease in accounts receivable.

For Juarez Company, accounts receivable decreased \$3,000. Thus, cash receipts from customers were \$978,000, computed as shown in Illustration 17B-3.

**Illustration 17B-3**  
Computation of cash receipts from customers

Revenues from sales	\$ 975,000
Add: Decrease in accounts receivable	<u>3,000</u>
<b>Cash receipts from customers</b>	<b><u>\$ 978,000</u></b>

Juarez can also determine cash receipts from customers from an analysis of the Accounts Receivable account, as shown in Illustration 17B-4.

**Illustration 17B-4**  
Analysis of accounts receivable

Accounts Receivable			
1/1/10	Balance	15,000	<b>Receipts from customers</b> <span style="float: right;"><b>978,000</b></span>
	Revenues from sales	975,000	
12/31/10	Balance	12,000	

**HELPFUL HINT**  
The T account shows that revenue plus decrease in receivables equals cash receipts.

Illustration 17B-5 shows the relationships among cash receipts from customers, revenues from sales, and changes in accounts receivable.

**Illustration 17B-5**  
Formula to compute cash receipts from customers—direct method

<b>Cash Receipts from Customers</b>	=	Revenues from Sales	{	+ Decrease in Accounts Receivable or – Increase in Accounts Receivable
-------------------------------------	---	---------------------	---	--

**Cash Payments to Suppliers.** Juarez Company reported cost of goods sold of \$660,000 on its income statement. How much of that was cash payments to suppliers? To answer that, it is first necessary to find purchases for the year. To find purchases, companies adjust cost of goods sold for the change in inventory. When inventory increases during the year, purchases for the year have exceeded cost of goods sold. As a result, to determine the amount of purchases, the company adds to cost of goods sold the increase in inventory.

In 2010, Juarez Company's inventory increased \$10,000. It computes purchases as follows.

Cost of goods sold	\$660,000
Add: Increase in inventory	10,000
<b>Purchases</b>	<b><u>\$670,000</u></b>

**Illustration 17B-6**  
Computation of purchases

After computing purchases, a company can determine cash payments to suppliers. This is done by adjusting purchases for the change in accounts payable. When accounts payable increase during the year, purchases on an accrual basis are higher than they are on a cash basis. As a result, to determine cash payments to suppliers, a company deducts from purchases the increase in accounts payable. On the other hand, if cash payments to suppliers exceed purchases, there will be a decrease in accounts payable. In that case, a company adds to purchases the decrease in accounts payable.

For Juarez Company, cash payments to suppliers were \$678,000, computed as follows.

Purchases	\$670,000
Add: Decrease in accounts payable	8,000
<b>Cash payments to suppliers</b>	<b><u>\$678,000</u></b>

**Illustration 17B-7**  
Computation of cash payments to suppliers

Juarez also can determine cash payments to suppliers from an analysis of the Accounts Payable account, as shown in Illustration 17B-8.

Accounts Payable				
<b>Payments to suppliers</b>	<b>678,000</b>	1/1/10	Balance	60,000
			Purchases	670,000
		12/31/10	Balance	52,000

**Illustration 17B-8**  
Analysis of accounts payable

**HELPFUL HINT**

The T account shows that purchases plus decrease in accounts payable equals payments to suppliers.

Illustration 17B-9 shows the relationships among cash payments to suppliers, cost of goods sold, changes in inventory, and changes in accounts payable.

$$\text{Cash Payments to Suppliers} = \text{Cost of Goods Sold} \left\{ \begin{array}{l} + \text{ Increase in Inventory} \\ \text{or} \\ - \text{ Decrease in Inventory} \end{array} \right\} \left\{ \begin{array}{l} + \text{ Decrease in Accounts Payable} \\ \text{or} \\ - \text{ Increase in Accounts Payable} \end{array} \right\}$$

**Illustration 17B-9**  
Formula to compute cash payments to suppliers—direct method

**Cash Payments for Operating Expenses.** Juarez reported on its income statement operating expenses of \$176,000. How much of that amount was cash paid for operating expenses? To answer that, we need to adjust this amount for any changes in prepaid expenses and accrued expenses payable. For example, if prepaid expenses increased during the year, cash paid for operating expenses is higher than operating expenses reported on the income statement. To convert operating expenses to cash payments for operating expenses, a company adds the increase to operating expenses. On the other hand, if prepaid expenses decrease during the year, it deducts the decrease from operating expenses.

Companies must also adjust operating expenses for changes in accrued expenses payable. When accrued expenses payable increase during the year, operating expenses on an accrual basis are higher than they are in a cash basis. As a result, to determine cash payments for operating expenses, a company deducts from



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operating expenses an increase in accrued expenses payable. On the other hand, a company adds to operating expenses a decrease in accrued expenses payable because cash payments exceed operating expenses.

Juarez Company's cash payments for operating expenses were \$179,000, computed as follows.

**Illustration 17B-10**  
Computation of cash payments for operating expenses

Operating expenses	\$176,000
Deduct: Decrease in prepaid expenses	(2,000)
Add: Decrease in accrued expenses payable	<u>5,000</u>
<b>Cash payments for operating expenses</b>	<b><u>\$179,000</u></b>

Illustration 17B-11 shows the relationships among cash payments for operating expenses, changes in prepaid expenses, and changes in accrued expenses payable.

**Illustration 17B-11**  
Formula to compute cash payments for operating expenses—direct method

$$\begin{array}{l}
 \text{Cash Payments for Operating Expenses} \\
 \text{for Operating Expenses}
 \end{array}
 = \text{Operating Expenses}
 \left\{ \begin{array}{l}
 + \text{ Increase in Prepaid Expense} \\
 \text{or} \\
 - \text{ Decrease in Prepaid Expense}
 \end{array} \right.
 \left\{ \begin{array}{l}
 + \text{ Decrease in Accrued Expenses Payable} \\
 \text{or} \\
 - \text{ Increase in Accrued Expenses Payable}
 \end{array} \right.$$

**Depreciation Expense and Loss on Sale of Equipment.** Companies show operating expenses exclusive of depreciation. Juarez's depreciation expense in 2010 was \$18,000. Depreciation expense is not shown on a statement of cash flows because it is a noncash charge. If the amount for operating expenses includes depreciation expense, the company must reduce operating expenses by the amount of depreciation to determine cash payments for operating expenses.

The loss on sale of equipment of \$1,000 is also a noncash charge. The loss on sale of equipment reduces net income, but it does not reduce cash. Thus, companies do not report on a statement of cash flows the loss on sale of equipment.

Other charges to expense that do not require the use of cash, such as the amortization of intangible assets, depletion expense, and bad debt expense, are treated in the same manner as depreciation.

**Cash Payments for Income Taxes.** Juarez reported income tax expense of \$36,000 on the income statement. Income taxes payable, however, increased \$12,000. This increase means that the company has not yet paid \$12,000 of the income taxes. As a result, income taxes paid were less than income taxes reported in the income statement. Cash payments for income taxes were, therefore, \$24,000 as shown below.

**Illustration 17B-12**  
Computation of cash payments for income taxes

Income tax expense	\$36,000
Deduct: Increase in income taxes payable	<u>12,000</u>
<b>Cash payments for income taxes</b>	<b><u>\$24,000</u></b>

Illustration 17B-13 shows the relationships among cash payments for income taxes, income tax expense, and changes in income taxes payable.

**Illustration 17B-13**  
Formula to compute cash payments for income taxes—direct method

$$\begin{array}{l}
 \text{Cash Payments for Income Taxes} \\
 \text{for Income Taxes}
 \end{array}
 = \text{Income Tax Expense}
 \left\{ \begin{array}{l}
 + \text{ Decrease in Income Taxes Payable} \\
 \text{or} \\
 - \text{ Increase in Income Taxes Payable}
 \end{array} \right.$$

The operating activities section of the statement of cash flows of Juarez Company is shown in Illustration 17B-14.

Cash flows from operating activities			
Cash receipts from customers			\$978,000
Less: Cash payments:			
To suppliers	\$678,000		
For operating expenses	179,000		
For income taxes	24,000	881,000	
Net cash provided by operating activities			\$ 97,000

**Illustration 17B-14**  
Operating activities section of the statement of cash flows

When a company uses the direct method, it must also provide in a **separate schedule** (not shown here) the net cash flows from operating activities as computed under the indirect method.

## Step 2: Investing and Financing Activities

### ANALYZE CHANGES IN NONCURRENT ASSET AND LIABILITY ACCOUNTS AND RECORD AS INVESTING AND FINANCING ACTIVITIES, OR AS SIGNIFICANT NONCASH TRANSACTIONS

**Increase in Land.** Juarez's land increased \$60,000. The additional information section indicates that the company issued common stock to purchase the land. The issuance of common stock for land has no effect on cash. But it is a **significant noncash investing and financing transaction**. This transaction requires disclosure in a separate schedule at the bottom of the statement of cash flows.

**Increase in Equipment.** The comparative balance sheets show that equipment increased \$160,000 in 2010. The additional information in Illustration 17B-1 indicated that the increase resulted from two investing transactions: (1) Juarez purchased for cash equipment costing \$180,000. And (2) it sold for \$17,000 cash equipment costing \$20,000, whose book value was \$18,000. The relevant data for the statement of cash flows is the cash paid for the purchase and the cash proceeds from the sale. For Juarez Company, the investing activities section will show the following: The \$180,000 purchase of equipment as an outflow of cash, and the \$17,000 sale of equipment as an inflow of cash. The company **should not net** the two amounts. **Both individual outflows and inflows of cash should be shown.**

The analysis of the changes in equipment should include the related Accumulated Depreciation account. These two accounts for Juarez Company are shown in Illustration 17B-15.

Equipment				
1/1/10	Balance	–0–	Cost of equipment sold	20,000
	<b>Cash purchase</b>	<b>180,000</b>		
12/31/10	Balance	160,000		

**Illustration 17B-15**  
Analysis of equipment and related accumulated depreciation

Accumulated Depreciation—Equipment				
Sale of equipment	2,000	1/1/10	Balance	–0–
			Depreciation expense	18,000
		12/31/10	Balance	16,000

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**Increase in Bonds Payable.** Bonds Payable increased \$130,000. The additional information in Illustration 17B-1 indicated that Juarez issued, for \$130,000 cash, bonds with a face value of \$130,000. The issuance of bonds is a financing activity. For Juarez Company, there is an inflow of cash of \$130,000 from the issuance of bonds.

**Increase in Common Stock.** The Common Stock account increased \$60,000. The additional information indicated that Juarez acquired land from the issuance of common stock. This transaction is a **significant noncash investing and financing transaction** which the company should report separately at the bottom of the statement.

**Increase in Retained Earnings.** The \$52,000 net increase in Retained Earnings resulted from net income of \$84,000 and the declaration and payment of a cash dividend of \$32,000. Companies **do not report net income in the statement of cash flows under the direct method**. Cash dividends paid of \$32,000 are reported in the financing activities section as an outflow of cash.

**STATEMENT OF CASH FLOWS—2010**

Illustration 17B-16 shows the statement of cash flows for Juarez.

**Illustration 17B-16**  
Statement of cash flows,  
2010—direct method

<b>JUAREZ COMPANY</b>		
Statement of Cash Flows—Direct Method		
For the Year Ended December 31, 2010		
Cash flows from operating activities		
Cash receipts from customers		\$ 978,000
Less: Cash payments:		
To suppliers	\$ 678,000	
For operating expenses	179,000	
For income taxes	24,000	881,000
Net cash provided by operating activities		97,000
Cash flows from investing activities		
Purchase of equipment	(180,000)	
Sale of equipment	17,000	
Net cash used by investing activities		(163,000)
Cash flows from financing activities		
Issuance of bonds payable	130,000	
Payment of cash dividends	(32,000)	
Net cash provided by financing activities		98,000
Net increase in cash		32,000
Cash at beginning of period		159,000
Cash at end of period		\$ 191,000
<b>Noncash investing and financing activities</b>		
Issuance of common stock to purchase land		\$ 60,000

**Step 3: Net Change in Cash**

**COMPARE THE NET CHANGE IN CASH ON THE STATEMENT OF CASH FLOWS WITH THE CHANGE IN THE CASH ACCOUNT REPORTED ON THE BALANCE SHEET TO MAKE SURE THE AMOUNTS AGREE**

Illustration 17B-16 indicates that the net change in cash during the period was an increase of \$32,000. This agrees with the change in balances in the cash account reported on the balance sheets in Illustration 17B-1 (page 758).

## SUMMARY OF STUDY OBJECTIVE FOR APPENDIX 17B



**6 Prepare a statement of cash flows using the direct method.** The preparation of the statement of cash flows involves three major steps: (1) Determine net cash provided/used by operating activities by converting net income from an accrual basis to a cash basis. (2) Analyze changes in noncurrent asset and liability accounts and record as investing and financing activities, or disclose as noncash

transactions. (3) Compare the net change in cash on the statement of cash flows with the change in the cash account reported on the balance sheet to make sure the amounts agree. The direct method reports cash receipts less cash payments to arrive at net cash provided by operating activities.

## GLOSSARY FOR APPENDIX 17B



**Direct method** A method of determining net cash provided by operating activities by adjusting each item in the

income statement from the accrual basis to the cash basis. (pp. 737, 759)

### Comprehensive DO IT! 2



The income statement for Kosinski Manufacturing Company contains the following condensed information.

#### KOSINSKI MANUFACTURING COMPANY Income Statement For the Year Ended December 31, 2010

Revenues		\$6,583,000
Operating expenses, excluding depreciation	\$4,920,000	
Depreciation expense	<u>880,000</u>	<u>5,800,000</u>
Income before income taxes		783,000
Income tax expense		<u>353,000</u>
Net income		<u>\$ 430,000</u>

Included in operating expenses is a \$24,000 loss resulting from the sale of machinery for \$270,000 cash. Machinery was purchased at a cost of \$750,000. The following balances are reported on Kosinski's comparative balance sheet at December 31.

#### KOSINSKI MANUFACTURING COMPANY Comparative Balance Sheets (partial)

	<u>2010</u>	<u>2009</u>
Cash	\$672,000	\$130,000
Accounts receivable	775,000	610,000
Inventories	834,000	867,000
Accounts payable	521,000	501,000

Income tax expense of \$353,000 represents the amount paid in 2010. Dividends declared and paid in 2010 totaled \$200,000.

### Instructions

Prepare the statement of cash flows using the direct method.

**766 Chapter 17 Statement of Cash Flows****action plan**

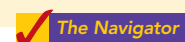
- ✓ Determine net cash from operating activities. Each item in the income statement must be adjusted to the cash basis.
- ✓ Determine net cash from investing activities. Investing activities generally relate to changes in noncurrent assets.
- ✓ Determine net cash from financing activities. Financing activities generally relate to changes in long-term liabilities and stockholders' equity accounts.

**Solution to Comprehensive DO IT! 2****KOSINSKI MANUFACTURING COMPANY****Statement of Cash Flows—Direct Method****For the Year Ended December 31, 2010**

Cash flows from operating activities		
Cash collections from customers		\$6,418,000*
Cash payments:		
For operating expenses	\$4,843,000**	
For income taxes	<u>353,000</u>	<u>5,196,000</u>
Net cash provided by operating activities		1,222,000
Cash flows from investing activities		
Sale of machinery	270,000	
Purchase of machinery	<u>(750,000)</u>	
Net cash used by investing activities		(480,000)
Cash flows from financing activities		
Payment of cash dividends	<u>(200,000)</u>	
Net cash used by financing activities		<u>(200,000)</u>
Net increase in cash		542,000
Cash at beginning of period		<u>130,000</u>
Cash at end of period		<u>\$ 672,000</u>

Direct-Method Computations:

*Computation of cash collections from customers:		
Revenues per the income statement		\$6,583,000
Deduct: Increase in accounts receivable		<u>(165,000)</u>
Cash collections from customers		<u>\$6,418,000</u>
**Computation of cash payments for operating expenses:		
Operating expenses per the income statement		\$4,920,000
Deduct: Loss from sale of machinery		(24,000)
Deduct: Decrease in inventories		(33,000)
Deduct: Increase in accounts payable		<u>(20,000)</u>
Cash payments for operating expenses		<u>\$4,843,000</u>



**Note:** All Questions, Exercises, and Problems marked with an asterisk relate to material in the appendices to the chapter.

**SELF-STUDY QUESTIONS**

Answers are at the end of the chapter.

- (SO 1) 1. Which of the following is *incorrect* about the statement of cash flows?
- a. It is a fourth basic financial statement.
  - b. It provides information about cash receipts and cash payments of an entity during a period.
  - c. It reconciles the ending cash account balance to the balance per the bank statement.
  - d. It provides information about the operating, investing, and financing activities of the business.
2. Which of the following will *not* be reported in the statement of cash flows? (SO 1)
- a. The net change in plant assets during the year.
  - b. Cash payments for plant assets during the year.
  - c. Cash receipts from sales of plant assets during the year.
  - d. How acquisitions of plant assets during the year were financed.
3. The statement of cash flows classifies cash receipts and cash payments by these activities: (SO 2)

- a. operating and nonoperating.
  - b. investing, financing, and operating.
  - c. financing, operating, and nonoperating.
  - d. investing, financing, and nonoperating.
- (SO 2) 4. Which is an example of a cash flow from an operating activity?
- a. Payment of cash to lenders for interest.
  - b. Receipt of cash from the sale of capital stock.
  - c. Payment of cash dividends to the company's stockholders.
  - d. None of the above.
- (SO 2) 5. Which is an example of a cash flow from an investing activity?
- a. Receipt of cash from the issuance of bonds payable.
  - b. Payment of cash to repurchase outstanding capital stock.
  - c. Receipt of cash from the sale of equipment.
  - d. Payment of cash to suppliers for inventory.
- (SO 2) 6. Cash dividends paid to stockholders are classified on the statement of cash flows as:
- a. operating activities.
  - b. investing activities.
  - c. a combination of (a) and (b).
  - d. financing activities.
- (SO 2) 7. Which is an example of a cash flow from a financing activity?
- a. Receipt of cash from sale of land.
  - b. Issuance of debt for cash.
  - c. Purchase of equipment for cash.
  - d. None of the above
- (SO 2) 8. Which of the following is *incorrect* about the statement of cash flows?
- a. The direct method may be used to report cash provided by operations.
  - b. The statement shows the cash provided (used) for three categories of activity.
  - c. The operating section is the last section of the statement.
  - d. The indirect method may be used to report cash provided by operations.

**Questions 9 through 11 apply only to the indirect method.**

- (SO 3) 9. Net income is \$132,000, accounts payable increased \$10,000 during the year, inventory decreased \$6,000 during the year, and accounts receivable increased \$12,000 during the year. Under the indirect method, what is net cash provided by operating activities?
- a. \$102,000.
  - b. \$112,000.
  - c. \$124,000.
  - d. \$136,000.
- (SO 3) 10. Items that are added back to net income in determining cash provided by operating activities under the indirect method do *not* include:
- a. depreciation expense.
  - b. an increase in inventory.
  - c. amortization expense.
  - d. loss on sale of equipment.
- (SO 3) 11. The following data are available for Allen Clapp Corporation.

Net income	\$200,000
Depreciation expense	40,000
Dividends paid	60,000
Gain on sale of land	10,000
Decrease in accounts receivable	20,000
Decrease in accounts payable	30,000

Net cash provided by operating activities is:

- a. \$160,000.
  - b. \$220,000.
  - c. \$240,000.
  - d. \$280,000.
12. The following data are available for Orange Peels Corporation. (SO 3)
- |                           |           |
|---------------------------|-----------|
| Sale of land              | \$100,000 |
| Sale of equipment         | 50,000    |
| Issuance of common stock  | 70,000    |
| Purchase of equipment     | 30,000    |
| Payment of cash dividends | 60,000    |
- Net cash provided by investing activities is:
- a. \$120,000.
  - b. \$130,000.
  - c. \$150,000.
  - d. \$190,000.
13. The following data are available for Something Strange! (SO 3)
- |                              |          |
|------------------------------|----------|
| Increase in accounts payable | \$40,000 |
| Increase in bonds payable    | 100,000  |
| Sale of investment           | 50,000   |
| Issuance of common stock     | 60,000   |
| Payment of cash dividends    | 30,000   |
- Net cash provided by financing activities is:
- a. \$90,000.
  - b. \$130,000.
  - c. \$160,000.
  - d. \$170,000.
14. The statement of cash flows should *not* be used to evaluate an entity's ability to: (SO 4)
- a. earn net income.
  - b. generate future cash flows.
  - c. pay dividends.
  - d. meet obligations.
15. Free cash flow provides an indication of a company's ability to: (SO4)
- a. generate net income.
  - b. generate cash to pay dividends.
  - c. generate cash to invest in new capital expenditures.
  - d. both (b) and (c).
- \*16. In a worksheet for the statement of cash flows, a decrease in accounts receivable is entered in the reconciling columns as a credit to Accounts Receivable and a debit in the: (SO 5)
- a. investing activities section.
  - b. operating activities section.
  - c. financing activities section.
  - d. None of the above.
- \*17. In a worksheet for the statement of cash flows, a worksheet entry that includes a credit to accumulated depreciation will also include a: (SO 5)
- a. credit in the operating section and a debit in another section.
  - b. debit in the operating section.
  - c. debit in the investing section.
  - d. debit in the financing section.

**Questions 18 and 19 apply only to the direct method.**

- \*18. The beginning balance in accounts receivable is \$44,000, the ending balance is \$42,000, and sales during the period are \$129,000. What are cash receipts from customers? (SO 6)
- a. \$127,000.
  - b. \$129,000.
  - c. \$131,000.
  - d. \$141,000.


## 768 Chapter 17 Statement of Cash Flows

- (SO 6)\*19. Which of the following items is reported on a cash flow statement prepared by the direct method?
- Loss on sale of building.
  - Increase in accounts receivable.
  - Depreciation expense.
  - Cash payments to suppliers.

Go to the book's companion website, [www.wiley.com/college/veygandt](http://www.wiley.com/college/veygandt), for Additional Self-Study questions.



### QUESTIONS

- What is a statement of cash flows?
  - John Norris maintains that the statement of cash flows is an optional financial statement. Do you agree? Explain.
- What questions about cash are answered by the statement of cash flows?
- Distinguish among the three types of activities reported in the statement of cash flows.
- What are the major sources (inflows) of cash in a statement of cash flows?
  - What are the major uses (outflows) of cash?
- Why is it important to disclose certain noncash transactions? How should they be disclosed?
- Wilma Flintstone and Barney Rublestone were discussing the format of the statement of cash flows of Hart Candy Co. At the bottom of Hart Candy's statement of cash flows was a separate section entitled "Noncash investing and financing activities." Give three examples of significant noncash transactions that would be reported in this section.
- Why is it necessary to use comparative balance sheets, a current income statement, and certain transaction data in preparing a statement of cash flows?
- Contrast the advantages and disadvantages of the direct and indirect methods of preparing the statement of cash flows. Are both methods acceptable? Which method is preferred by the FASB? Which method is more popular?
- When the total cash inflows exceed the total cash outflows in the statement of cash flows, how and where is this excess identified?
- Describe the indirect method for determining net cash provided (used) by operating activities.
- Why is it necessary to convert accrual-based net income to cash-basis income when preparing a statement of cash flows?
- The president of Ferneti Company is puzzled. During the last year, the company experienced a net loss of \$800,000, yet its cash increased \$300,000 during the same period of time. Explain to the president how this could occur.
- Identify five items that are adjustments to convert net income to net cash provided by operating activities under the indirect method.
- Why and how is depreciation expense reported in a statement prepared using the indirect method?
- Why is the statement of cash flows useful?
- During 2010 Doubleday Company converted \$1,700,000 of its total \$2,000,000 of bonds payable into common stock. Indicate how the transaction would be reported on a statement of cash flows, if at all.
- Why is it advantageous to use a worksheet when preparing a statement of cash flows? Is a worksheet required to prepare a statement of cash flows?
- Describe the direct method for determining net cash provided by operating activities.
- Give the formulas under the direct method for computing (a) cash receipts from customers and (b) cash payments to suppliers.
- Garcia Inc. reported sales of \$2 million for 2010. Accounts receivable decreased \$200,000 and accounts payable increased \$300,000. Compute cash receipts from customers, assuming that the receivable and payable transactions related to operations.
- In the direct method, why is depreciation expense not reported in the cash flows from operating activities section?
-  **PEPSICO** In its 2007 statement of cash flows, what amount did **PepsiCo** report for net cash (a) provided by operating activities, (b) used for investing activities, and (c) used for financing activities?

### BRIEF EXERCISES

Indicate statement presentation of selected transactions.

(SO 2)

- BE17-1** Each of these items must be considered in preparing a statement of cash flows for Kiner Co. for the year ended December 31, 2010. For each item, state how it should be shown in the statement of cash flows for 2010.
- Issued bonds for \$200,000 cash.
  - Purchased equipment for \$150,000 cash.
  - Sold land costing \$20,000 for \$20,000 cash.
  - Declared and paid a \$50,000 cash dividend.



**BE17-2** Classify each item as an operating, investing, or financing activity. Assume all items involve cash unless there is information to the contrary.

- (a) Purchase of equipment.
- (b) Sale of building.
- (c) Redemption of bonds.
- (d) Depreciation.
- (e) Payment of dividends.
- (f) Issuance of capital stock.

*Classify items by activities.*

(SO 2)

**BE17-3** The following T account is a summary of the cash account of Edmonds Company.

Cash (Summary Form)			
Balance, Jan. 1	8,000		
Receipts from customers	364,000	Payments for goods	200,000
Dividends on stock investments	6,000	Payments for operating expenses	140,000
Proceeds from sale of equipment	36,000	Interest paid	10,000
Proceeds from issuance of bonds payable	300,000	Taxes paid	8,000
		Dividends paid	50,000
Balance, Dec. 31	306,000		

*Identify financing activity transactions.*

(SO 2)

What amount of net cash provided (used) by financing activities should be reported in the statement of cash flows?

*Compute cash provided by operating activities—indirect method.*

(SO 3)

**BE17-4** Martinez, Inc. reported net income of \$2.5 million in 2010. Depreciation for the year was \$160,000, accounts receivable decreased \$350,000, and accounts payable decreased \$280,000. Compute net cash provided by operating activities using the indirect method.

**BE17-5** The net income for Adcock Co. for 2010 was \$280,000. For 2010 depreciation on plant assets was \$70,000, and the company incurred a loss on sale of plant assets of \$12,000. Compute net cash provided by operating activities under the indirect method.

*Compute cash provided by operating activities—indirect method.*

(SO 3)

**BE17-6** The comparative balance sheets for Goltra Company show these changes in noncash current asset accounts: accounts receivable decrease \$80,000, prepaid expenses increase \$28,000, and inventories increase \$30,000. Compute net cash provided by operating activities using the indirect method assuming that net income is \$200,000.

*Compute net cash provided by operating activities—indirect method.*

(SO 3)

**BE17-7** The T accounts for Equipment and the related Accumulated Depreciation for Pettengill Company at the end of 2010 are shown here.

Equipment				Accumulated Depreciation			
Beg. bal.	80,000	Disposals	22,000	Disposals	5,500	Beg. bal.	44,500
Acquisitions	41,600					Depr. exp.	12,000
End. bal.	99,600					End. bal.	51,000

*Determine cash received from sale of equipment.*

(SO 3)

In addition, Pettengill Company's income statement reported a loss on the sale of equipment of \$5,500. What amount was reported on the statement of cash flows as "cash flow from sale of equipment"?

**BE17-8** In a recent year, **Cypress Semiconductor Corporation** reported cash provided by operating activities of \$155,793,000, cash used in investing of \$207,826,000, and cash used in financing of \$33,372,000. In addition, cash spent for fixed assets during the period was \$132,280,000. No dividends were paid. Calculate free cash flow.

*Calculate free cash flow.*

(SO 4)

**BE17-9** Lott Corporation reported cash provided by operating activities of \$360,000, cash used by investing activities of \$250,000, and cash provided by financing activities of \$70,000. In addition, cash spent for capital assets during the period was \$200,000. No dividends were paid. Calculate free cash flow.

*Calculate free cash flow.*

(SO 4)

**BE17-10** In a recent quarter, **Alliance Atlantis Communications Inc.** reported cash provided by operating activities of \$45,600,000 and revenues of \$264,800,000. Cash spent on plant asset additions during the quarter was \$1,600,000. Calculate free cash flow.

*Calculate free cash flow.*

(SO 4)

**BE17-11** The management of Radar Inc. is trying to decide whether it can increase its dividend. During the current year it reported net income of \$875,000. It had cash provided by operating activities of \$734,000, paid cash dividends of \$70,000, and had capital expenditures of \$280,000.

*Calculate and analyze free cash flow.*

(SO 4)



## 770 Chapter 17 Statement of Cash Flows

Compute the company's free cash flow, and discuss whether an increase in the dividend appears warranted. What other factors should be considered?

Indicate entries in worksheet.  
(SO 5)

**\*BE17-12** During the year, prepaid expenses decreased \$6,600, and accrued expenses increased \$2,400. Indicate how the changes in prepaid expenses and accrued expenses payable should be entered in the reconciling columns of a worksheet. Assume that beginning balances were: Prepaid expenses \$18,600 and Accrued expenses payable \$8,200.

Compute receipts from customers—direct method.  
(SO 6)

**\*BE17-13** Columbia Sportswear Company had accounts receivable of \$206,024,000 at the beginning of a recent year, and \$267,653,000 at year-end. Sales revenues were \$1,095,307,000 for the year. What is the amount of cash receipts from customers?

Compute cash payments for income taxes—direct method.  
(SO 6)

**\*BE17-14** Young Corporation reported income taxes of \$340,000,000 on its 2010 income statement and income taxes payable of \$277,000,000 at December 31, 2009, and \$522,000,000 at December 31, 2010. What amount of cash payments were made for income taxes during 2010?

Compute cash payments for operating expenses—direct method.  
(SO 6)

**\*BE17-15** Flynn Corporation reports operating expenses of \$80,000 excluding depreciation expense of \$15,000 for 2010. During the year prepaid expenses decreased \$6,600 and accrued expenses payable increased \$4,400. Compute the cash payments for operating expenses in 2010.

### DO IT! REVIEW



Classify transactions by type of cash flow activity.  
(SO 2)

**DO IT! 17-1** Rapture Corporation had the following transactions.

1. Issued \$200,000 of bonds payable.
2. Paid utilities expense.
3. Issued 500 shares of preferred stock for \$45,000.
4. Sold land and a building for \$250,000.
5. Lent \$30,000 to Dead End Corporation, receiving Dead End's 1-year, 12% note.

Classify each of these transactions by type of cash flow activity (operating, investing, or financing).

Calculate net cash from operating activities.  
(SO 3)

**DO IT! 17-2** JMB Photography reported net income of \$100,000 for 2010. Included in the income statement were depreciation expense of \$6,000, patent amortization expense of \$2,000, and a gain on sale of equipment of \$3,600. JMB's comparative balance sheets show the following balances.

	12/31/09	12/31/10
Accounts receivable	\$27,000	\$21,000
Accounts payable	6,000	9,200

Calculate net cash provided by operating activities for JMB Photography

Compute and discuss free cash flow.  
(SO 4)

**DO IT! 17-3** Grinders Corporation issued the following statement of cash flows for 2010.

#### GRINDERS CORPORATION

Statement of Cash Flows—Indirect Method  
For the Year Ended December 31, 2010

Cash flows from operating activities		
Net income		\$59,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$9,100	
Decrease in accounts receivable	9,500	
Loss on sale of equipment	3,300	
Increase in inventory	(5,000)	
Decrease in accounts payable	(2,200)	
	14,700	14,700
Net cash provided by operating activities		73,700

Cash flows from investing activities		
Sale of investments	3,100	
Purchase of equipment	<u>(27,000)</u>	
Net cash used by investing activities		(23,900)
Cash flows from financing activities		
Issuance of stock	20,000	
Payment on long-term note payable	<u>(10,000)</u>	
Payment for dividends	<u>(15,000)</u>	
Net cash used by financing activities		<u>(5,000)</u>
Net increase in cash		44,800
Cash at beginning of year		<u>13,000</u>
Cash at end of year		<u>\$57,800</u>

(a) Compute free cash flow for Grinders Corporation. (b) Explain why free cash flow often provides better information than “Net cash provided by operating activities.”

## EXERCISES



**E17-1** Pioneer Corporation had these transactions during 2010.

- (a) Issued \$50,000 par value common stock for cash.
- (b) Purchased a machine for \$30,000, giving a long-term note in exchange.
- (c) Issued \$200,000 par value common stock upon conversion of bonds having a face value of \$200,000.
- (d) Declared and paid a cash dividend of \$18,000.
- (e) Sold a long-term investment with a cost of \$15,000 for \$15,000 cash.
- (f) Collected \$16,000 of accounts receivable.
- (g) Paid \$18,000 on accounts payable.

Classify transactions by type of activity.

(SO 2)

### Instructions

Analyze the transactions and indicate whether each transaction resulted in a cash flow from operating activities, investing activities, financing activities, or noncash investing and financing activities.

**E17-2** An analysis of comparative balance sheets, the current year’s income statement, and the general ledger accounts of Gagliano Corp. uncovered the following items. Assume all items involve cash unless there is information to the contrary.

Classify transactions by type of activity.

(SO 2)

- (a) Payment of interest on notes payable.
- (b) Exchange of land for patent.
- (c) Sale of building at book value.
- (d) Payment of dividends.
- (e) Depreciation.
- (f) Receipt of dividends on investment in stock.
- (g) Receipt of interest on notes receivable.
- (h) Issuance of capital stock.
- (i) Amortization of patent.
- (j) Issuance of bonds for land.
- (k) Purchase of land.
- (l) Conversion of bonds into common stock.
- (m) Loss on sale of land.
- (n) Retirement of bonds.

### Instructions

Indicate how each item should be classified in the statement of cash flows using these four major classifications: operating activity (indirect method), investing activity, financing activity, and significant noncash investing and financing activity.

**E17-3** Rachael Ray Corporation had the following transactions.

1. Sold land (cost \$12,000) for \$15,000.
2. Issued common stock for \$20,000.
3. Recorded depreciation of \$17,000.
4. Paid salaries of \$9,000.
5. Issued 1,000 shares of \$1 par value common stock for equipment worth \$8,000.
6. Sold equipment (cost \$10,000, accumulated depreciation \$7,000) for \$1,200.

Prepare journal entry and determine effect on cash flows.

(SO 2)

**772 Chapter 17 Statement of Cash Flows**

**Instructions**

For each transaction above, (a) prepare the journal entry, and (b) indicate how it would affect the statement of cash flows.

Prepare the operating activities section—indirect method.

(SO 3)

**E17-4** Villa Company reported net income of \$195,000 for 2010. Villa also reported depreciation expense of \$45,000 and a loss of \$5,000 on the sale of equipment. The comparative balance sheet shows a decrease in accounts receivable of \$15,000 for the year, a \$17,000 increase in accounts payable, and a \$4,000 decrease in prepaid expenses.

**Instructions**

Prepare the operating activities section of the statement of cash flows for 2010. Use the indirect method.

Prepare the operating activities section—indirect method.

(SO 3)

**E17-5** The current sections of Bellinham Inc.'s balance sheets at December 31, 2009 and 2010, are presented here.

Bellinham's net income for 2010 was \$153,000. Depreciation expense was \$24,000.

	<u>2010</u>	<u>2009</u>
Current assets		
Cash	\$105,000	\$ 99,000
Accounts receivable	110,000	89,000
Inventory	158,000	172,000
Prepaid expenses	<u>27,000</u>	<u>22,000</u>
Total current assets	<u>\$400,000</u>	<u>\$382,000</u>
Current liabilities		
Accrued expenses payable	\$ 15,000	\$ 5,000
Accounts payable	<u>85,000</u>	<u>92,000</u>
Total current liabilities	<u>\$100,000</u>	<u>\$ 97,000</u>

**Instructions**

Prepare the net cash provided by operating activities section of the company's statement of cash flows for the year ended December 31, 2010, using the indirect method.

Prepare partial statement of cash flows—indirect method.

(SO 3)

**E17-6** The three accounts shown below appear in the general ledger of Cesar Corp. during 2010.

<b>Equipment</b>			
<u>Date</u>		<u>Debit</u>	<u>Credit</u>
Jan. 1	Balance		160,000
July 31	Purchase of equipment	70,000	230,000
Sept. 2	Cost of equipment constructed	53,000	283,000
Nov. 10	Cost of equipment sold		49,000
			234,000

<b>Accumulated Depreciation—Equipment</b>			
<u>Date</u>		<u>Debit</u>	<u>Credit</u>
Jan. 1	Balance		71,000
Nov. 10	Accumulated depreciation on equipment sold	30,000	41,000
Dec. 31	Depreciation for year		28,000
			69,000

<b>Retained Earnings</b>			
<u>Date</u>		<u>Debit</u>	<u>Credit</u>
Jan. 1	Balance		105,000
Aug. 23	Dividends (cash)	14,000	91,000
Dec. 31	Net income		67,000
			158,000

**Instructions**

From the postings in the accounts, indicate how the information is reported on a statement of cash flows using the indirect method. The loss on sale of equipment was \$5,000. (*Hint:* Cost of equipment constructed is reported in the investing activities section as a decrease in cash of \$53,000.)

**E17-7** Scully Corporation's comparative balance sheets are presented below.

*Prepare statement of cash flows and compute free cash flow.*

(SO 3, 4)

**SCULLY CORPORATION**

Comparative Balance Sheets  
December 31

	<u>2010</u>	<u>2009</u>
Cash	\$ 14,300	\$ 10,700
Accounts receivable	21,200	23,400
Land	20,000	26,000
Building	70,000	70,000
Accumulated depreciation	(15,000)	(10,000)
Total	<u>\$110,500</u>	<u>\$120,100</u>
Accounts payable	\$12,370	\$31,100
Common stock	75,000	69,000
Retained earnings	23,130	20,000
Total	<u>\$110,500</u>	<u>\$120,100</u>

Additional information:

- Net income was \$22,630. Dividends declared and paid were \$19,500.
- All other changes in noncurrent account balances had a direct effect on cash flows, except the change in accumulated depreciation. The land was sold for \$4,900.

**Instructions**

- Prepare a statement of cash flows for 2010 using the indirect method.
- Compute free cash flow.

**E17-8** Here are comparative balance sheets for Taguchi Company.

*Prepare a statement of cash flows—indirect method.*

(SO 3)

**TAGUCHI COMPANY**

Comparative Balance Sheets  
December 31

<u>Assets</u>	<u>2010</u>	<u>2009</u>
Cash	\$ 73,000	\$ 22,000
Accounts receivable	85,000	76,000
Inventories	170,000	189,000
Land	75,000	100,000
Equipment	260,000	200,000
Accumulated depreciation	(66,000)	(32,000)
Total	<u>\$597,000</u>	<u>\$555,000</u>
 <b><u>Liabilities and Stockholders' Equity</u></b>		
Accounts payable	\$ 39,000	\$ 47,000
Bonds payable	150,000	200,000
Common stock (\$1 par)	216,000	174,000
Retained earnings	192,000	134,000
Total	<u>\$597,000</u>	<u>\$555,000</u>

Additional information:

- Net income for 2010 was \$103,000.
- Cash dividends of \$45,000 were declared and paid.
- Bonds payable amounting to \$50,000 were redeemed for cash \$50,000.
- Common stock was issued for \$42,000 cash.
- No equipment was sold during 2010, but land was sold at cost.

## 774 Chapter 17 Statement of Cash Flows

### Instructions

Prepare a statement of cash flows for 2010 using the indirect method.

Prepare statement of cash flows and compute free cash flow.

(SO 3, 4)

**E17-9** Muldur Corporation's comparative balance sheets are presented below.

### MULDUR CORPORATION

Comparative Balance Sheets  
December 31

	<u>2010</u>	<u>2009</u>
Cash	\$ 15,200	\$ 17,700
Accounts receivable	25,200	22,300
Investments	20,000	16,000
Equipment	60,000	70,000
Accumulated depreciation	(14,000)	(10,000)
Total	<u>\$106,400</u>	<u>\$116,000</u>
Accounts payable	\$ 14,600	\$ 11,100
Bonds payable	10,000	30,000
Common stock	50,000	45,000
Retained earnings	31,800	29,900
Total	<u>\$106,400</u>	<u>\$116,000</u>

Additional information:

- Net income was \$18,300. Dividends declared and paid were \$16,400.
- Equipment which cost \$10,000 and had accumulated depreciation of \$1,200 was sold for \$3,300.
- All other changes in noncurrent account balances had a direct effect on cash flows, except the change in accumulated depreciation.

### Instructions

- Prepare a statement of cash flows for 2010 using the indirect method.
- Compute free cash flow.

Prepare a worksheet.

(SO 5)

**\*E17-10** Comparative balance sheets for Eddie Murphy Company are presented below.

### EDDIE MURPHY COMPANY

Comparative Balance Sheets  
December 31

<u>Assets</u>	<u>2010</u>	<u>2009</u>
Cash	\$ 63,000	\$ 22,000
Accounts receivable	85,000	76,000
Inventories	180,000	189,000
Land	75,000	100,000
Equipment	260,000	200,000
Accumulated depreciation	(66,000)	(42,000)
Total	<u>\$597,000</u>	<u>\$545,000</u>
<u>Liabilities and Stockholders' Equity</u>		
Accounts payable	\$ 34,000	\$ 47,000
Bonds payable	150,000	200,000
Common stock (\$1 par)	214,000	164,000
Retained earnings	199,000	134,000
Total	<u>\$597,000</u>	<u>\$545,000</u>

Additional information:

- Net income for 2010 was \$125,000.
- Cash dividends of \$60,000 were declared and paid.

3. Bonds payable amounting to \$50,000 were redeemed for cash \$50,000.
4. Common stock was issued for \$50,000 cash.
5. Depreciation expense was \$24,000.
6. Sales for the year were \$978,000.

**Instructions**

Prepare a worksheet for a statement of cash flows for 2010 using the indirect method. Enter the reconciling items directly on the worksheet, using letters to cross-reference each entry.

**\*E17-11** Hairston Company completed its first year of operations on December 31, 2010. Its initial income statement showed that Hairston had revenues of \$192,000 and operating expenses of \$78,000. Accounts receivable and accounts payable at year-end were \$60,000 and \$23,000, respectively. Assume that accounts payable related to operating expenses. Ignore income taxes.

*Compute cash provided by operating activities—direct method.*

(SO 6)

**Instructions**

Compute net cash provided by operating activities using the direct method.

**\*E17-12** A recent income statement for **McDonald's Corporation** shows cost of goods sold \$4,852.7 million and operating expenses (including depreciation expense of \$1,201 million) \$10,671.5 million. The comparative balance sheet for the year shows that inventory increased \$18.1 million, prepaid expenses increased \$56.3 million, accounts payable (merchandise suppliers) increased \$136.9 million, and accrued expenses payable increased \$160.9 million.

*Compute cash payments—direct method.*

(SO 6)

**Instructions**

Using the direct method, compute (a) cash payments to suppliers and (b) cash payments for operating expenses.

**\*E17-13** The 2010 accounting records of Verlander Transport reveal these transactions and events.

Payment of interest	\$ 10,000	Collection of accounts receivable	\$182,000
Cash sales	48,000	Payment of salaries and wages	53,000
Receipt of dividend revenue	18,000	Depreciation expense	16,000
Payment of income taxes	12,000	Proceeds from sale of vehicles	12,000
Net income	38,000	Purchase of equipment for cash	22,000
Payment of accounts payable		Loss on sale of vehicles	3,000
for merchandise	115,000	Payment of dividends	14,000
Payment for land	74,000	Payment of operating expenses	28,000

*Compute cash flow from operating activities—direct method.*

(SO 6)

**Instructions**

Prepare the cash flows from operating activities section using the direct method. (Not all of the items will be used.)

**\*E17-14** The following information is taken from the 2010 general ledger of Pierzynski Company.

*Calculate cash flows—direct method.*

(SO 6)

Rent	Rent expense	\$ 40,000
	Prepaid rent, January 1	5,900
	Prepaid rent, December 31	9,000
Salaries	Salaries expense	\$ 54,000
	Salaries payable, January 1	10,000
	Salaries payable, December 31	8,000
Sales	Revenue from sales	\$170,000
	Accounts receivable, January 1	16,000
	Accounts receivable, December 31	7,000

**Instructions**

In each case, compute the amount that should be reported in the operating activities section of the statement of cash flows under the direct method.

**EXERCISES: SET B**

Visit the book's companion website at [www.wiley.com/college/veygandt](http://www.wiley.com/college/veygandt), and choose the Student Companion site, to access Exercise Set B.



**776 Chapter 17 Statement of Cash Flows**



**PROBLEMS: SET A**

*Distinguish among operating, investing, and financing activities.*

(SO 2)

**P17-1A** You are provided with the following transactions that took place during a recent fiscal year.

<u>Transaction</u>	<u>Where Reported on Statement</u>	<u>Cash Inflow, Outflow, or No Effect?</u>
(a) Recorded depreciation expense on the plant assets.		
(b) Recorded and paid interest expense.		
(c) Recorded cash proceeds from a sale of plant assets.		
(d) Acquired land by issuing common stock.		
(e) Paid a cash dividend to preferred stockholders.		
(f) Distributed a stock dividend to common stockholders.		
(g) Recorded cash sales.		
(h) Recorded sales on account.		
(i) Purchased inventory for cash.		
(j) Purchased inventory on account.		

**Instructions**

Complete the table indicating whether each item (1) should be reported as an operating (O) activity, investing (I) activity, financing (F) activity, or as a noncash (NC) transaction reported in a separate schedule, and (2) represents a cash inflow or cash outflow or has no cash flow effect. Assume use of the indirect approach.

*Determine cash flow effects of changes in equity accounts.*

(SO 3)

**P17-2A** The following account balances relate to the stockholders' equity accounts of Gore Corp. at year-end.

	<u>2010</u>	<u>2009</u>
Common stock, 10,500 and 10,000 shares, respectively, for 2010 and 2009	\$160,000	\$140,000
Preferred stock, 5,000 shares	125,000	125,000
Retained earnings	300,000	260,000

A small stock dividend was declared and issued in 2010. The market value of the shares was \$10,500. Cash dividends were \$15,000 in both 2010 and 2009. The common stock has no par or stated value.

**Instructions**

(a) Net income \$65,500

- (a) What was the amount of net income reported by Gore Corp. in 2010?
- (b) Determine the amounts of any cash inflows or outflows related to the common stock and dividend accounts in 2010.
- (c) Indicate where each of the cash inflows or outflows identified in (b) would be classified on the statement of cash flows.

*Prepare the operating activities section—indirect method.*

(SO 3)

**P17-3A** The income statement of Elbert Company is presented here.

**ELBERT COMPANY**

Income Statement  
For the Year Ended November 30, 2010

Sales	\$7,700,000
Cost of goods sold	
Beginning inventory	\$1,900,000
Purchases	4,400,000
Goods available for sale	6,300,000
Ending inventory	1,400,000



Total cost of goods sold	4,900,000
Gross profit	2,800,000
Operating expenses	1,150,000
Net income	<u>\$1,650,000</u>

Additional information:

1. Accounts receivable increased \$250,000 during the year, and inventory decreased \$500,000.
2. Prepaid expenses increased \$150,000 during the year.
3. Accounts payable to suppliers of merchandise decreased \$340,000 during the year.
4. Accrued expenses payable decreased \$100,000 during the year.
5. Operating expenses include depreciation expense of \$90,000.

**Instructions**

Prepare the operating activities section of the statement of cash flows for the year ended November 30, 2010, for Elbert Company, using the indirect method.

Cash from operations  
\$1,400,000

**\*P17-4A** Data for Elbert Company are presented in P17-3A.

Prepare the operating activities section—direct method.

**Instructions**

Prepare the operating activities section of the statement of cash flows using the direct method.

(SO 6)

Cash from operations  
\$1,400,000

**P17-5A** Grania Company's income statement contained the condensed information below.

Prepare the operating activities section—indirect method.

(SO 3)

**GRANIA COMPANY**  
Income Statement  
For the Year Ended December 31, 2010

Revenues		\$970,000
Operating expenses, excluding depreciation	\$624,000	
Depreciation expense	60,000	
Loss on sale of equipment	16,000	<u>700,000</u>
Income before income taxes		270,000
Income tax expense		<u>40,000</u>
Net income		<u>\$230,000</u>



Grania's balance sheet contained the comparative data at December 31, shown below.

	<b>2010</b>	<b>2009</b>
Accounts receivable	\$75,000	\$60,000
Accounts payable	41,000	28,000
Income taxes payable	11,000	7,000

Accounts payable pertain to operating expenses.

**Instructions**

Prepare the operating activities section of the statement of cash flows using the indirect method.

Cash from operations  
\$308,000

**\*P17-6A** Data for Grania Company are presented in P17-5A.

Prepare the operating activities section—direct method.

**Instructions**

Prepare the operating activities section of the statement of cash flows using the direct method.

(SO 6)

Cash from operations  
\$308,000

**P17-7A** Presented on the next page are the financial statements of Weller Company.





**778 Chapter 17 Statement of Cash Flows**

Prepare a statement of cash flows—indirect method, and compute free cash flow.

(SO 3, 4)



**WELLER COMPANY**  
Comparative Balance Sheets  
December 31

<u>Assets</u>	<u>2010</u>	<u>2009</u>
Cash	\$ 35,000	\$ 20,000
Accounts receivable	33,000	14,000
Merchandise inventory	27,000	20,000
Property, plant, and equipment	60,000	78,000
Accumulated depreciation	(29,000)	(24,000)
Total	<u>\$126,000</u>	<u>\$108,000</u>
<u>Liabilities and Stockholders' Equity</u>		
Accounts payable	\$ 29,000	\$ 15,000
Income taxes payable	7,000	8,000
Bonds payable	27,000	33,000
Common stock	18,000	14,000
Retained earnings	45,000	38,000
Total	<u>\$126,000</u>	<u>\$108,000</u>

**WELLER COMPANY**  
Income Statement  
For the Year Ended December 31, 2010

Sales	\$242,000
Cost of goods sold	175,000
Gross profit	67,000
Operating expenses	24,000
Income from operations	43,000
Interest expense	3,000
Income before income taxes	40,000
Income tax expense	8,000
Net income	<u>\$ 32,000</u>

Additional data:

1. Dividends declared and paid were \$25,000.
2. During the year equipment was sold for \$8,500 cash. This equipment cost \$18,000 originally and had a book value of \$8,500 at the time of sale.
3. All depreciation expense, \$14,500, is in the operating expenses.
4. All sales and purchases are on account.

(a) Cash from operations  
\$33,500

**Instructions**

- (a) Prepare a statement of cash flows using the indirect method.
- (b) Compute free cash flow.

Prepare a statement of cash flows—direct method, and compute free cash flow.

(SO 4, 6)



(a) Cash from operations  
\$33,500

**\*P17-8A** Data for Weller Company are presented in P17-7A. Further analysis reveals the following.

1. Accounts payable pertain to merchandise suppliers.
2. All operating expenses except for depreciation were paid in cash.

**Instructions**

- (a) Prepare a statement of cash flows for Weller Company using the direct method.
- (b) Compute free cash flow.

**P17-9A** Condensed financial data of Arma Inc. follow.

*Prepare a statement of cash flows—indirect method.*

(SO 3)

<b>ARMA INC.</b>		
Comparative Balance Sheets		
December 31		
<u>Assets</u>	<u>2010</u>	<u>2009</u>
Cash	\$ 90,800	\$ 48,400
Accounts receivable	92,800	33,000
Inventories	112,500	102,850
Prepaid expenses	28,400	26,000
Investments	138,000	114,000
Plant assets	270,000	242,500
Accumulated depreciation	(50,000)	(52,000)
Total	<u>\$682,500</u>	<u>\$514,750</u>
<u>Liabilities and Stockholders' Equity</u>		
Accounts payable	\$112,000	\$ 67,300
Accrued expenses payable	16,500	17,000
Bonds payable	110,000	150,000
Common stock	220,000	175,000
Retained earnings	224,000	105,450
Total	<u>\$682,500</u>	<u>\$514,750</u>

**ARMA INC.**  
Income Statement  
For the Year Ended December 31, 2010

Sales		\$392,780
Less:		
Cost of goods sold	\$135,460	
Operating expenses, excluding depreciation	12,410	
Depreciation expense	46,500	
Income taxes	27,280	
Interest expense	4,730	
Loss on sale of plant assets	<u>7,500</u>	<u>233,880</u>
Net income		<u>\$158,900</u>

Additional information:

1. New plant assets costing \$85,000 were purchased for cash during the year.
2. Old plant assets having an original cost of \$57,500 were sold for \$1,500 cash.
3. Bonds matured and were paid off at face value for cash.
4. A cash dividend of \$40,350 was declared and paid during the year.

**Instructions**

Prepare a statement of cash flows using the indirect method.

Cash from operations  
\$185,250

**\*P17-10A** Data for Arma Inc. are presented in P17-9A. Further analysis reveals that accounts payable pertain to merchandise creditors.

*Prepare a statement of cash flows—direct method.*

(SO 6)

**Instructions**

Prepare a statement of cash flows for Arma Inc. using the direct method.

Cash from operations  
\$185,250

*Prepare a statement of cash flows—indirect method.*

(SO 3)

**P17-11A** The comparative balance sheets for Ramirez Company as of December 31 are presented on the next page.

**780 Chapter 17 Statement of Cash Flows**

**RAMIREZ COMPANY**  
Comparative Balance Sheets  
December 31

<u>Assets</u>	<u>2010</u>	<u>2009</u>
Cash	\$ 71,000	\$ 45,000
Accounts receivable	44,000	62,000
Inventory	151,450	142,000
Prepaid expenses	15,280	21,000
Land	105,000	130,000
Equipment	228,000	155,000
Accumulated depreciation—equipment	(45,000)	(35,000)
Building	200,000	200,000
Accumulated depreciation—building	(60,000)	(40,000)
Total	<u>\$709,730</u>	<u>\$680,000</u>
<u>Liabilities and Stockholders' Equity</u>		
Accounts payable	\$ 47,730	\$ 40,000
Bonds payable	260,000	300,000
Common stock, \$1 par	200,000	160,000
Retained earnings	202,000	180,000
Total	<u>\$709,730</u>	<u>\$680,000</u>

Additional information:

1. Operating expenses include depreciation expense of \$42,000 and charges from prepaid expenses of \$5,720.
2. Land was sold for cash at book value.
3. Cash dividends of \$15,000 were paid.
4. Net income for 2010 was \$37,000.
5. Equipment was purchased for \$95,000 cash. In addition, equipment costing \$22,000 with a book value of \$10,000 was sold for \$6,000 cash.
6. Bonds were converted at face value by issuing 40,000 shares of \$1 par value common stock.

Cash from operations  
\$105,000

**Instructions**

Prepare a statement of cash flows for the year ended December 31, 2010, using the indirect method.

Prepare a worksheet—indirect method.

**\*P17-12A** Condensed financial data of Oprah Company appear below.

(SO 5)



**OPRAH COMPANY**  
Comparative Balance Sheets  
December 31

<u>Assets</u>	<u>2010</u>	<u>2009</u>
Cash	\$ 92,700	\$ 47,250
Accounts receivable	90,800	57,000
Inventories	121,900	102,650
Investments	84,500	87,000
Plant assets	250,000	205,000
Accumulated depreciation	(49,500)	(40,000)
Total	<u>\$590,400</u>	<u>\$458,900</u>
<u>Liabilities and Stockholders' Equity</u>		
Accounts payable	\$ 57,700	\$ 48,280
Accrued expenses payable	12,100	18,830
Bonds payable	100,000	70,000
Common stock	250,000	200,000
Retained earnings	170,600	121,790
Total	<u>\$590,400</u>	<u>\$458,900</u>

**OPRAH COMPANY**

Income Statement  
For the Year Ended December 31, 2010

Sales		\$297,500	
Gain on sale of plant assets		8,750	
			<u>306,250</u>
Less:			
Cost of goods sold	\$99,460		
Operating expenses (excluding depreciation expense)	14,670		
Depreciation expense	49,700		
Income taxes	7,270		
Interest expense	<u>2,940</u>		<u>174,040</u>
Net income			<u>\$132,210</u>

Additional information:

1. New plant assets costing \$92,000 were purchased for cash during the year.
2. Investments were sold at cost.
3. Plant assets costing \$47,000 were sold for \$15,550, resulting in gain of \$8,750.
4. A cash dividend of \$83,400 was declared and paid during the year.

**Instructions**

Prepare a worksheet for the statement of cash flows using the indirect method. Enter the reconciling items directly in the worksheet columns, using letters to cross-reference each entry.

Reconciling items  
total \$610,210

**PROBLEMS: SET B**

**P17-1B** You are provided with the following transactions that took place during a recent fiscal year.

*Distinguish among operating, investing, and financing activities.*

(SO 2)

<u>Transaction</u>	<u>Where Reported on Statement</u>	<u>Cash Inflow, Outflow, or No Effect?</u>
(a) Recorded depreciation expense on the plant assets.		
(b) Incurred a loss on disposal of plant assets.		
(c) Acquired a building by paying cash.		
(d) Made principal repayments on a mortgage.		
(e) Issued common stock.		
(f) Purchased shares of another company to be held as a long-term equity investment.		
(g) Paid dividends to common stockholders.		
(h) Sold inventory on credit. The company uses a perpetual inventory system.		
(i) Purchased inventory on credit.		
(j) Paid wages to employees.		

**Instructions**

Complete the table indicating whether each item (1) should be reported as an operating (O) activity, investing (I) activity, financing (F) activity, or as a noncash (NC) transaction reported in a separate schedule, and (2) represents a cash inflow or cash outflow or has no cash flow effect. Assume use of the indirect approach.

## 782 Chapter 17 Statement of Cash Flows

Determine cash flow effects of changes in plant asset accounts.

(SO 3)

**P17-2B** The following selected account balances relate to the plant asset accounts of Wegent Inc. at year-end.

	<u>2010</u>	<u>2009</u>
Accumulated depreciation—buildings	\$337,500	\$300,000
Accumulated depreciation—equipment	144,000	96,000
Buildings	750,000	750,000
Depreciation expense	101,500	85,500
Equipment	300,000	240,000
Land	100,000	70,000
Loss on sale of equipment	8,000	0

Additional information:

1. Wegent purchased \$95,000 of equipment and \$30,000 of land for cash in 2010.
2. Wegent also sold equipment in 2010.
3. Depreciation expense in 2010 was \$37,500 on building and \$64,000 on equipment.

### Instructions

(a) Cash proceeds \$11,000

- (a) Determine the amounts of any cash inflows or outflows related to the plant asset accounts in 2010.
- (b) Indicate where each of the cash inflows or outflows identified in (a) would be classified on the statement of cash flows.

Prepare the operating activities section—indirect method.

(SO 3)

**P17-3B** The income statement of Rosenthal Company is presented below.

Additional information:

1. Accounts receivable decreased \$320,000 during the year, and inventory increased \$120,000.
2. Prepaid expenses increased \$175,000 during the year.
3. Accounts payable to merchandise suppliers increased \$50,000 during the year.
4. Accrued expenses payable increased \$155,000 during the year.

### ROSENTHAL COMPANY

Income Statement  
For the Year Ended December 31, 2010

Sales		\$5,400,000
Cost of goods sold		
Beginning inventory	\$1,780,000	
Purchases	<u>3,430,000</u>	
Goods available for sale	5,210,000	
Ending inventory	<u>1,900,000</u>	
Total cost of goods sold		<u>3,310,000</u>
Gross profit		2,090,000
Operating expenses		
Depreciation expense	105,000	
Amortization expense	20,000	
Other expenses	<u>945,000</u>	<u>1,070,000</u>
Net income		<u><u>\$1,020,000</u></u>

### Instructions

Prepare the operating activities section of the statement of cash flows for the year ended December 31, 2010, for Rosenthal Company, using the indirect method.

**\*P17-4B** Data for Rosenthal Company are presented in P17-3B.

### Instructions

Prepare the operating activities section of the statement of cash flows using the direct method.

Cash from operations  
\$1,375,000

Prepare the operating activities section—direct method.

(SO 6)

Cash from operations  
\$1,375,000

**P17-5B** The income statement of Brislin Inc. reported the following condensed information.

Prepare the operating activities section—indirect method.

**BRISLIN INC.**

Income Statement  
For the Year Ended December 31, 2010

Revenues	\$545,000
Operating expenses	<u>400,000</u>
Income from operations	145,000
Income tax expense	<u>36,000</u>
Net income	<u>\$109,000</u>

(SO 3)



Brislin's balance sheet contained these comparative data at December 31.

	<u>2010</u>	<u>2009</u>
Accounts receivable	\$50,000	\$70,000
Accounts payable	30,000	51,000
Income taxes payable	10,000	4,000

Brislin has no depreciable assets. Accounts payable pertain to operating expenses.

**Instructions**

Prepare the operating activities section of the statement of cash flows using the indirect method.

Cash from operations  
\$114,000

**\*P17-6B** Data for Brislin Inc. are presented in P17-5B.

Prepare the operating activities section—direct method.

**Instructions**

Prepare the operating activities section of the statement of cash flows using the direct method.

(SO 6)

Cash from operations  
\$114,000

**P17-7B** Presented below are the financial statements of Ortega Company.

**ORTEGA COMPANY**

Comparative Balance Sheets  
December 31

<u>Assets</u>	<u>2010</u>	<u>2009</u>
Cash	\$ 24,000	\$ 33,000
Accounts receivable	25,000	14,000
Merchandise inventory	41,000	25,000
Property, plant, and equipment	\$ 70,000	\$ 78,000
Less: Accumulated depreciation	<u>(27,000)</u>	<u>(24,000)</u>
Total	<u>\$133,000</u>	<u>\$126,000</u>

Prepare a statement of cash flows—indirect method, and compute free cash flow.

(SO 3, 4)



**Liabilities and Stockholders' Equity**

Accounts payable	\$ 31,000	\$ 43,000
Income taxes payable	24,000	20,000
Bonds payable	20,000	10,000
Common stock	25,000	25,000
Retained earnings	<u>33,000</u>	<u>28,000</u>
Total	<u>\$133,000</u>	<u>\$126,000</u>

**ORTEGA COMPANY**

Income Statement  
For the Year Ended December 31, 2010

Sales	\$286,000
Cost of goods sold	<u>204,000</u>
Gross profit	82,000

**784 Chapter 17 Statement of Cash Flows**

Operating expenses	37,000
Income from operations	45,000
Interest expense	7,000
Income before income taxes	38,000
Income tax expense	10,000
Net income	<u>\$ 28,000</u>

Additional data:

- Dividends of \$23,000 were declared and paid.
- During the year equipment was sold for \$10,000 cash. This equipment cost \$15,000 originally and had a book value of \$10,000 at the time of sale.
- All depreciation expense, \$8,000, is in the operating expenses.
- All sales and purchases are on account.
- Additional equipment was purchased for \$7,000 cash.

**Instructions**

- Prepare a statement of cash flows using the indirect method.
- Compute free cash flow.

(a) Cash from operations  
\$1,000

Prepare a statement of cash flows—direct method, and compute free cash flow.

(SO 4, 6)



(a) Cash from operations  
\$1,000

**\*P17-8B** Data for Ortega Company are presented in P17-7B. Further analysis reveals the following.

- Accounts payable pertains to merchandise creditors.
- All operating expenses except for depreciation are paid in cash.

**Instructions**

- Prepare a statement of cash flows using the direct method.
- Compute free cash flow.

**P17-9B** Condensed financial data of Ziebert Company are shown below.

Prepare a statement of cash flows—indirect method.

(SO 3)

**ZIEBERT COMPANY**  
Comparative Balance Sheets  
December 31

<u>Assets</u>	<u>2010</u>	<u>2009</u>
Cash	\$102,700	\$ 33,400
Accounts receivable	60,800	37,000
Inventories	126,900	102,650
Investments	79,500	107,000
Plant assets	315,000	205,000
Accumulated depreciation	(44,500)	(40,000)
Total	<u>\$640,400</u>	<u>\$445,050</u>
 <b><u>Liabilities and Stockholders' Equity</u></b>		
Accounts payable	\$ 57,700	\$ 48,280
Accrued expenses payable	15,100	18,830
Bonds payable	145,000	70,000
Common stock	250,000	200,000
Retained earnings	172,600	107,940
Total	<u>\$640,400</u>	<u>\$445,050</u>

**ZIEBERT COMPANY**  
Income Statement  
For the Year Ended December 31, 2010

Sales	\$297,500
Gain on sale of plant assets	5,000
	<u>302,500</u>

Less:		
Cost of goods sold	\$99,460	
Operating expenses, excluding depreciation expense	19,670	
Depreciation expense	30,500	
Income taxes	37,270	
Interest expense	2,940	189,840
Net income		<u>\$112,660</u>

Additional information:

1. New plant assets costing \$146,000 were purchased for cash during the year.
2. Investments were sold at cost.
3. Plant assets costing \$36,000 were sold for \$15,000, resulting in a gain of \$5,000.
4. A cash dividend of \$48,000 was declared and paid during the year.

**Instructions**

Prepare a statement of cash flows using the indirect method.

Cash from operations  
\$95,800

**\*P17-10B** Data for Ziebert Company are presented in P17-9B. Further analysis reveals that accounts payable pertain to merchandise creditors.

Prepare a statement of cash flows—direct method.

**Instructions**

Prepare a statement of cash flows for Ziebert Company using the direct method.

(SO 6)

Cash from operations  
\$95,800

**P17-11B** Presented below are the comparative balance sheets for Marin Company at December 31.

Prepare a statement of cash flows—indirect method.

(SO 3)

**MARIN COMPANY**  
Comparative Balance Sheets  
December 31

<u>Assets</u>	<u>2010</u>	<u>2009</u>
Cash	\$ 41,000	\$ 57,000
Accounts receivable	77,000	64,000
Inventory	172,000	140,000
Prepaid expenses	12,140	16,540
Land	110,000	150,000
Equipment	215,000	175,000
Accumulated depreciation—equipment	(70,000)	(42,000)
Building	250,000	250,000
Accumulated depreciation—building	(70,000)	(50,000)
Total	<u>\$737,140</u>	<u>\$760,540</u>
 <u>Liabilities and Stockholders' Equity</u>		
Accounts payable	\$ 58,000	\$ 45,000
Bonds payable	235,000	265,000
Common stock, \$1 par	280,000	250,000
Retained earnings	164,140	200,540
Total	<u>\$737,140</u>	<u>\$760,540</u>

Additional information:

1. Operating expenses include depreciation expense \$55,000 and charges from prepaid expenses of \$4,400.
2. Land was sold for cash at cost.
3. Cash dividends of \$84,290 were paid.
4. Net income for 2010 was \$47,890.
5. Equipment was purchased for \$80,000 cash. In addition, equipment costing \$40,000 with a book value of \$33,000 was sold for \$37,000 cash.
6. Bonds were converted at face value by issuing 30,000 shares of \$1 par value common stock.

**Instructions**

Prepare a statement of cash flows for 2010 using the indirect method.

Cash from operations  
\$71,290





## PROBLEMS: SET C

Visit the book's companion website at [www.wiley.com/college/veygandt](http://www.wiley.com/college/veygandt) and choose the Student Companion site to access Problem Set C.

## CONTINUING COOKIE CHRONICLE

(Note: This is a continuation of the Cookie Chronicle from Chapters 1 through 16.)

**CCC17** Natalie has prepared the balance sheet and income statement of Cookie & Coffee Creations Inc. and would like you to prepare the cash flow statement.



Go to the book's companion website, [www.wiley.com/college/veygandt](http://www.wiley.com/college/veygandt), to see the completion of this problem.

# BROADENING YOUR PERSPECTIVE

## FINANCIAL REPORTING AND ANALYSIS

### Financial Reporting Problem: PepsiCo, Inc.

**BYP17-1** Refer to the financial statements of PepsiCo's, presented in Appendix A, and answer the following questions.



**PEPSICO**

- What was the amount of net cash provided by operating activities for the year ended December 29, 2007? For the year ended December 30, 2006?
- What was the amount of increase or decrease in cash and cash equivalents for the year ended December 29, 2007? For the year ended December 30, 2006?
- Which method of computing net cash provided by operating activities does PepsiCo use?
- From your analysis of the 2007 statement of cash flows, did the change in accounts and notes receivable require or provide cash? Did the change in inventories require or provide cash? Did the change in accounts payable and other current liabilities require or provide cash?
- What was the net outflow or inflow of cash from investing activities for the year ended December 29, 2007?
- What was the amount of interest paid in the year ended December 29, 2007? What was the amount of income taxes paid in the year ended December 29, 2007? (See Note 14.)

### Comparative Analysis Problem: PepsiCo, Inc. vs. The Coca-Cola Company

**BYP17-2** PepsiCo's financial statements are presented in Appendix A. Financial statements of The Coca-Cola Company are presented in Appendix B.



**PEPSICO**

#### Instructions

- Based on the information contained in these financial statements, compute free cash flow for each company.
- What conclusions concerning the management of cash can be drawn from these data?

### Exploring the Web

**BYP17-3** Purpose: Learn about the SEC.

**Address:** [www.sec.gov/index.html](http://www.sec.gov/index.html), or go to [www.wiley.com/college/veygandt](http://www.wiley.com/college/veygandt)

From the SEC homepage, choose **About the SEC**.



**Instructions**

Answer the following questions.

- (a) How many enforcement actions does the SEC take each year against securities law violators? What are typical infractions?
- (b) After the Depression, Congress passed the Securities Acts of 1933 and 1934 to improve investor confidence in the markets. What two “common sense” notions are these laws based on?
- (c) Who was the President of the United States at the time of the creation of the SEC? Who was the first SEC Chairperson?

**BYP17-4** Purpose: Use the Internet to view SEC filings.

**Address:** [biz.yahoo.com/i](http://biz.yahoo.com/i), or go to [www.wiley.com/college/weygandt](http://www.wiley.com/college/weygandt)

**Steps**

1. Type in a company name.
2. Choose **Profile**.
3. Choose **SEC Filings**. (This will take you to Yahoo-Edgar Online.)

**Instructions**

Answer the following questions.

- (a) What company did you select?
- (b) Which filing is the most recent? What is the date?
- (c) What other recent SEC filings are available for your viewing?

## CRITICAL THINKING

### Decision Making Across the Organization



**BYP17-5** Ron Nord and Lisa Smith are examining the following statement of cash flows for Carpino Company for the year ended January 31, 2010.

<b>CARPINO COMPANY</b>	
Statement of Cash Flows	
For the Year Ended January 31, 2010	
Sources of cash	
From sales of merchandise	\$380,000
From sale of capital stock	420,000
From sale of investment (purchased below)	80,000
From depreciation	55,000
From issuance of note for truck	20,000
From interest on investments	6,000
Total sources of cash	961,000
Uses of cash	
For purchase of fixtures and equipment	330,000
For merchandise purchased for resale	258,000
For operating expenses (including depreciation)	160,000
For purchase of investment	75,000
For purchase of truck by issuance of note	20,000
For purchase of treasury stock	10,000
For interest on note payable	3,000
Total uses of cash	856,000
Net increase in cash	\$ 105,000

Ron claims that Carpino’s statement of cash flows is an excellent portrayal of a superb first year with cash increasing \$105,000. Lisa replies that it was not a superb first year. Rather, she says, the year was an operating failure, that the statement is presented incorrectly, and that \$105,000 is not the actual increase in cash. The cash balance at the beginning of the year was \$140,000.

## 788 Chapter 17 Statement of Cash Flows

### Instructions

With the class divided into groups, answer the following.

- (a) Using the data provided, prepare a statement of cash flows in proper form using the indirect method. The only noncash items in the income statement are depreciation and the gain from the sale of the investment.
- (b) With whom do you agree, Ron or Lisa? Explain your position.

## Communication Activity

**BYP17-6** Kyle Benson, the owner-president of Computer Services Company, is unfamiliar with the statement of cash flows that you, as his accountant, prepared. He asks for further explanation.

### Instructions

Write him a brief memo explaining the form and content of the statement of cash flows as shown in Illustration 17-13 (page 746).

## Ethics Case

**BYP17-7** Tappit Corp. is a medium-sized wholesaler of automotive parts. It has 10 stockholders who have been paid a total of \$1 million in cash dividends for 8 consecutive years. The board's policy requires that, for this dividend to be declared, net cash provided by operating activities as reported in Tappit's current year's statement of cash flows must exceed \$1 million. President and CEO Willie Morton's job is secure so long as he produces annual operating cash flows to support the usual dividend.

At the end of the current year, controller Robert Jennings presents president Willie Morton with some disappointing news: The net cash provided by operating activities is calculated by the indirect method to be only \$970,000. The president says to Robert, "We must get that amount above \$1 million. Isn't there some way to increase operating cash flow by another \$30,000?" Robert answers, "These figures were prepared by my assistant. I'll go back to my office and see what I can do." The president replies, "I know you won't let me down, Robert."

Upon close scrutiny of the statement of cash flows, Robert concludes that he can get the operating cash flows above \$1 million by reclassifying a \$60,000, 2-year note payable listed in the financing activities section as "Proceeds from bank loan—\$60,000." He will report the note instead as "Increase in payables—\$60,000" and treat it as an adjustment of net income in the operating activities section. He returns to the president, saying, "You can tell the board to declare their usual dividend. Our net cash flow provided by operating activities is \$1,030,000." "Good man, Robert! I knew I could count on you," exults the president.

### Instructions

- (a) Who are the stakeholders in this situation?
- (b) Was there anything unethical about the president's actions? Was there anything unethical about the controller's actions?
- (c) Are the board members or anyone else likely to discover the misclassification?



## "All About You" Activity

**BYP17-8** In this chapter you learned that companies prepare a statement of cash flows in order to keep track of their sources and uses of cash and to help them plan for their future cash needs. Planning for your own short- and long-term cash needs is every bit as important as it is for a company.

### Instructions

Read the article ("Financial Uh-Oh? No Problem") provided at [www.fool.com/personal-finance/saving/index.aspx](http://www.fool.com/personal-finance/saving/index.aspx), and answer the following questions.

- (a) Describe the three factors that determine how much money you should set aside for short-term needs.
- (b) How many months of living expenses does the article suggest to set aside?
- (c) Estimate how much you should set aside based upon your current situation. Are you closer to Cliff's scenario or to Prudence's?

## Answers to Insight and Accounting Across the Organization Questions



### p. 735 Net What?

Q: In general, why do differences exist between net income and net cash provided by operating activities?

A: *The differences are explained by differences in the timing of the reporting of revenues and expenses under accrual accounting versus cash. Under accrual accounting, companies report revenues when earned, even if cash hasn't been received, and they report expenses when incurred, even if cash hasn't been paid.*

### p. 744 GM Must Sell More Cars

Q: Why does GM's cash provided by operating activities drop so precipitously when the company's sales figures decline?

A: *GM's cash inflow is directly related to how many cars it sells. But many of its cash outflows are not tied to sales—they are "fixed." For example, many of its employee payroll costs are very rigid due to labor contracts. Therefore, even though sales (and therefore cash inflows) fall, these cash outflows don't decline.*

## Answers to Self-Study Questions

1. c   2. a   3. b   4. a   5. c   6. d   7. b   8. c   9. d   10. b   11. b   12. a   13. b  
14. a   15. d   \*16. b   \*17. b   \*18. c   \*19. d